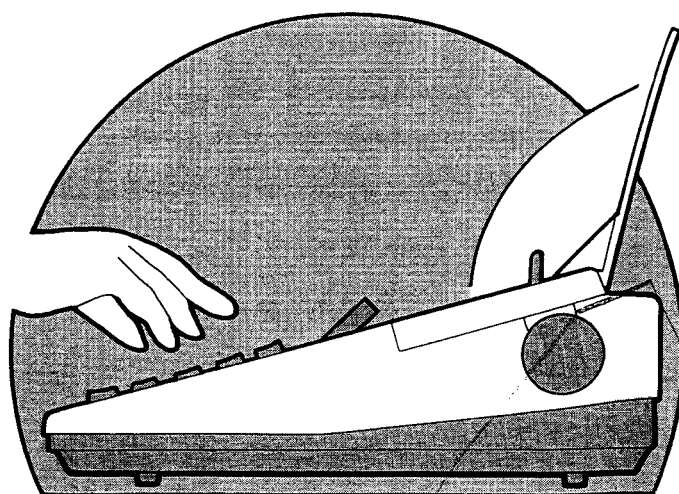


Panasonic

WORD PROCESSING TYPEWRITER

OPERATING INSTRUCTIONS

MODEL NO. **KX-R800**



Before operating this unit, please read these instructions completely.

Thank you for your purchase of the Panasonic Word Processing Typewriter KX-R800.

This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications set forth in Subpart J of Part 15 of the FCC Rules. If this equipment does cause interference to radio or television reception which can be determined by turning the equipment on and off, use the equipment in another location and/or utilize an electrical outlet different from that used by the receiver.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR ANY TYPE OF MOISTURE.

The serial number of the unit may be found on the label at the right side of the unit when the Top Cover is opened. For your convenience, note this number below, and retain this book along with your proof of purchase, to serve as a permanent record of your purchase or for future reference.

MODEL NO. KX-R800

SERIAL NO. _____

NAME OF DEALER _____

ADDRESS OF DEALER _____

DATE OF PURCHASE _____

Accessories (included)

Make sure that the following parts have been included with the unit.

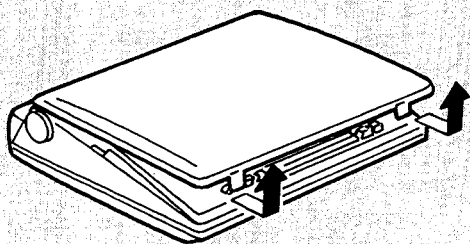
- | | |
|--|--|
| • Ribbon Cassette 1
(installed on the carriage) | • Daisywheel [KX-R10] 1
(installed on the carriage) |
| • Correction Tape 1
(installed on the carriage) | • AC Power Cord 1 |
| | • Operating Instruction Manual 1 |
| | • Hard Cover 1 |

Any details given in these Operating Instructions are subject to change without notice.

Precautions

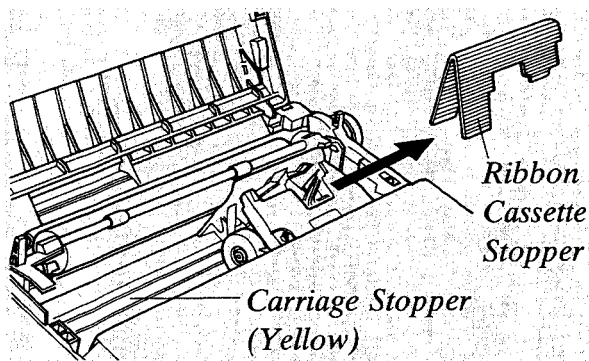
(Be sure to read this section before operating the unit.)

To use the unit, first remove the Hard Cover as shown in the figure.



- After confirming that the **POWER** switch is turned OFF, open the Top Cover and remove the Ribbon Cassette Stopper installed on the Ribbon Cassette and the Carriage Stopper installed on the carriage shaft.

Be sure to keep these stoppers so the unit can be transported safely, if the need arises.



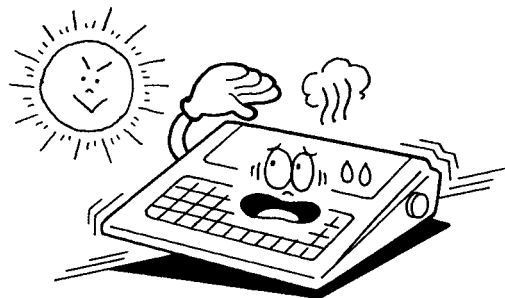
- When you transport or ship the typewriter, be sure to position the carriage at the far right of the unit, and insert the Carriage Stopper and the Ribbon Cassette Stopper.

**If there is a protective film on the LCD Cover, remove it so that it does not interfere with the LCD.*

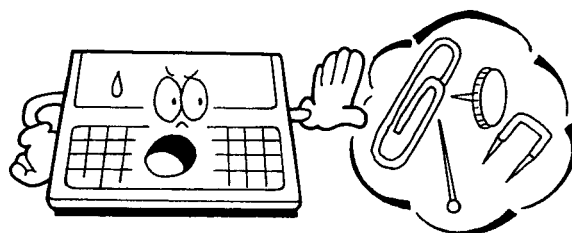
(Refer to p. 6.)

Cautions

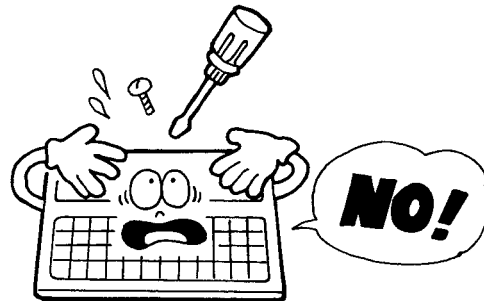
- Do not place your typewriter where it is exposed to direct sunlight, heat or intense vibration.



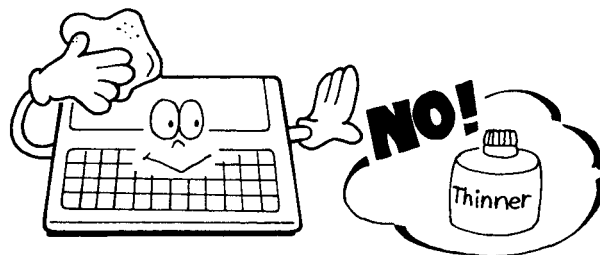
- Do not allow any foreign matter to enter the interior of the typewriter or get between the keys. Be especially careful of metal objects.



- To prevent electric shock, do not remove screws. No user serviceable parts inside.



- Use only soft, dry cloth to clean your typewriter. Water or thinners may damage the covers, cases or electronic circuitry.



The Operating Instructions for the typewriter
are composed of the following six chapters.

Chapter 1 BEFORE USING THE TYPEWRITER

1-1 COMPONENT DESCRIPTION	6-11
(A) Main Parts	6
(B) Selector Keys	8

(C) Using the LCD display	10
(D) Function Keys	12
1-2 POWER SUPPLY	14
(A) Using Household AC Power	14
(B) Power Switch	14
(C) Memory Back-up Function	14

Chapter 2 BASIC OPERATIONS

2-1 USING THE TYPEWRITER	17-34
(A) Procedure for Typing	17
(B) Margin Formats	18
(C) Hot Zone	19

(D) Using the Display	19
(E) Index and Reverse Index	20
(F) Correction	20
(G) Bold Print	27
(H) Underlining	27
(I) Decimal Tabulation	28
(J) Carriage Return (NORM·AUTO)	29

Chapter 3 MEMORY

3-1 MEMORY	38
3-2 PHRASE MEMORY	39-43
(A) To Store Information in the Phrase Memory	39
(B) To print from the Phrase Memory	40
(C) To Stop Printing in the Middle of a Phrase	40
(D) To Modify a Phrase	41
(E) To Scroll through Phrase Memory	41
(F) Direct Search to a Particular Point	42
(G) To Disable the Status Line Information in Text Mode	43

(H) To Clear a Phrase from Memory	43
3-3 TEXT MEMORY	44-59
(A) To Store Information in the Text Memory	45
(B) To Add to an Existing Text (File)	46
(C) To Print a Text from Memory	47
(D) To Stop Printing in the Middle of a Text	48
(E) To Print from a Particular Point	48
(F) To Modify a Text (File)	49
(G) Word Search	50
(H) Word Replace	51
(I) To Insert a Phrase into Text Memory	53

Chapter 4 ACCU-SPELL PLUS

4-1 ACCU-SPELL PLUS™ (Spell Verifying/ Correcting Feature)	75-81
(A) Accu-Spell Plus Operation	76

(B) How to Verify/Correct the Spelling of an Entire File	78
(C) How to Add Words to the User's Dictionary	79

Chapter 5 PRINTER

5-1 USE AS A PRINTER (with KX-R60)	82-84
---	-------

(A) Connection to a Computer	82
(B) Operation	82
(C) Reference	83, 84

Chapter 6 APPENDIX

6-1 OTHERS	85
(A) Troubleshooting	85

(B) Product Service	85
6-2 LIST OF CODE KEY FUNCTIONS	86, 87

1-3	CHANGING THE RIBBON	
	CASSETTE	14
1-4	CHANGING THE	
	CORRECTION TAPE	15
1-5	CHANGING THE DAISYWHEEL	15
1-6	INSERTING THE PAPER	16

Ⓚ	Centering	29
Ⓛ	Right Margin Flush	31
Ⓜ	Paragraph Indent	32
Ⓝ	Permanent Hyphen	32
Ⓞ	Permanent Space	33
Ⓟ	Caps Lock	33

Ⓠ	Micro-Pitch Spacing	34
Ⓡ	Half Space	34
Ⓢ	Typing Impression Control	34
2-2	AUTO COLUMN	35-38

Ⓣ	Block Move, Copy and Delete	54
Ⓚ	To Copy a Text to Another Text	
	Name	56
Ⓛ	To Rename a Text	57
Ⓜ	To List Texts on the Display	57
Ⓝ	To Print the Text Listing	58
Ⓞ	Memory Left	58
Ⓟ	To Clear a Text from Memory	58
Ⓠ	To Change the Margin Format	
	in the Text	59
Ⓡ	Word-Wrap	59
3-4	APPLICATION	60, 61
Ⓐ	Stop Code	60
Ⓑ	To Store Information	
	without Printing	61
3-5	ADDRESS LIST MEMORY	62-74

Ⓐ	To Store Information in the	
	Address List Memory	63, 64
Ⓑ	To Add to an Existing Address	
	List	65
Ⓒ	To Scroll through Address List	
	Memory	65
Ⓓ	To Modify a Record	66
Ⓔ	Name Search	68
Ⓕ	To Print from the Address List	
	Memory	69
Ⓖ	To Stop Printing in the Middle	
	of the Record	70
Ⓗ	To Print All of the Records	70
Ⓘ	To Print a Record on an	
	Envelope	71-73
Ⓣ	To Delete a Record from	
	Memory	74

Ⓓ	How to Delete Words from	
	the User's Dictionary	80
Ⓔ	How to List Words in	
	the User's Dictionary	81

6-3	LIST OF DISPLAY	
	MESSAGES	88, 89
6-4	OPTIONAL ACCESSORIES	90

6-5	SPECIFICATIONS	90
6-6	INDEX	91, 92

1-1 COMPONENT DESCRIPTION

A Main Parts

Paper Support

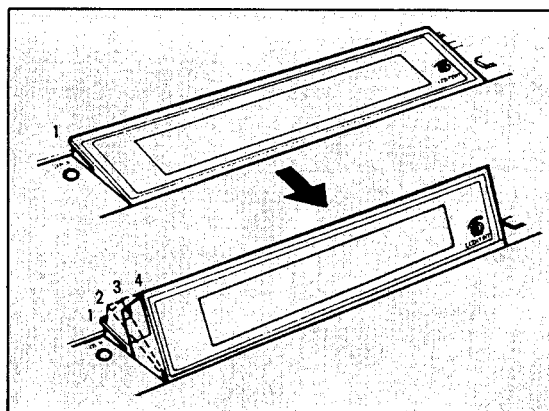
Platen

Paper Guide
(Refer to page 16.)

Platen Knob (left)
This is used to manually feel the paper up or down.
Pushing the left platen knob inward engages the Platen clutch so that the paper can be rotated freely without affecting the line spacing.

Paper Bail Lever
Pulling this lever toward you moves the Paper Bail away from the Platen to make paper insertion easy.

LCD UP Button
This is used to adjust the angle of the LCD display. The display can be adjusted to one of four positions. Pushing this button once, the LCD display pops up and then pull the LCD display towards you. Choose the position best suited to your specific typing position and lighting environment.



Top Cover
The cover must be opened when you change the daisywheel, ribbon cassette or correction tape.
It activates the Safety Interlock Switch so that the carriage will move to the center of the machine and stop when it is opened.

Carriage
The ribbon cassette, correction tape and daisywheel are mounted on the carriage.

LCD Cover

Paper Release Lever

This lever is used to release the feed rollers. Pulling this lever toward you releases the feed rollers so that you can adjust the paper freely. Be sure to move this lever back to engage the paper before typing.

Platen Knob (right)

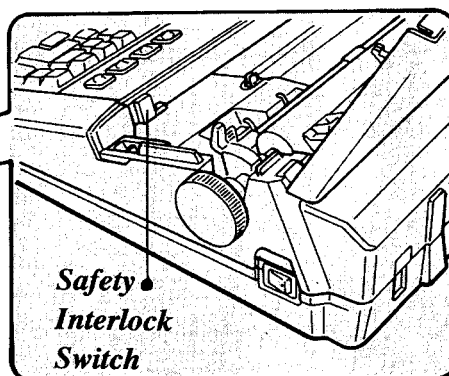
The Knob does not contain a platen clutch.

Paper Bail and Rollers

These are used to hold the paper against the Platen. Set the rollers according to the width of the paper being used.

Pitch Scale

Scales for three pitches of 10, 12 and 15 characters per inch are shown. Use these scales for margin and tab setting.



LCD display Contrast Adjuster

This is used to adjust the contrast of the LCD display.

4-Line by 40-Character Adjustable-Angle LCD display

Your typewriter has a 4-Line by 40-Character Adjustable-Angle LCD display which lets you view the typed characters before printing. A 3-digit counter lets you know how many characters are left on the current line. You can also see the information stored in Phrase, Text or Address List Memory to correct, delete, move or edit before printing.

Carrying Handle

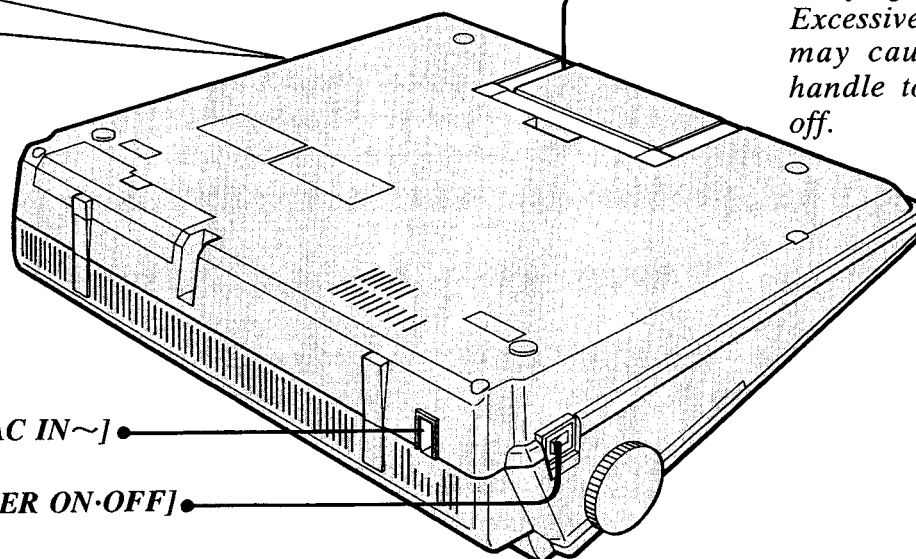
Excessive stress may cause the handle to snap off.

Interface Connector

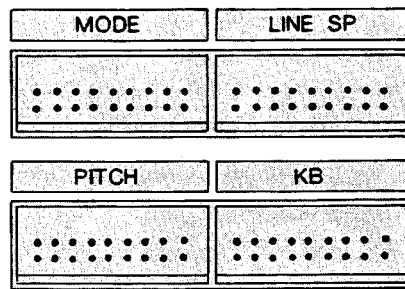
You can use this unit as a printer by connecting the optional Interface Adaptor KX-R60 to receive data from a Computer.

Power Input Jack [AC IN~]

Power Switch [POWER ON-OFF]



B Selector Keys



Typing Mode Key (MODE)

Each time this key is pressed, the indication will display "TPW", "L/L" and "JST" in that order.

Typewriter (TPW) Mode

The characters entered will be printed immediately and also they will be appeared on the display. You can set the margins and tabs in this mode.

You can select either **NORM** or **AUTO** Carriage Return in this mode by pressing the **CODE+A** keys.

Line by Line (L/L) Typing Mode

When character keys are pressed, the respective characters appear on the display and can be edited (inserted, deleted, corrected) on the display before they are printed. You can select either **NORM** or **AUTO** Carriage Return in this mode. To print a line which does not reach the right margin or "Hot Zone", press the **RETURN** key.

Justify (JST) Typing Mode

The typed characters will first appear on the display, at which time the characters can be edited before they are printed. When the characters exceed the right margin, the typewriter will start printing the line up to the last word within the right margin, aligning the last character of each line at the right margin and returning the carriage automatically.

To print a line which does not reach the right margin, press the **RETURN** key.

Pitch Key (PITCH)

This key should correspond with the pitch of daisywheel in the machine.

Each time this key is pressed, the indication will change "10", "12" and "15" in that order.

"10" 10 characters per inch (2.54 cm) or 100 characters per line can be printed.

"12" 12 characters per inch (2.54 cm) or 120 characters per line can be printed.

"15" 15 characters per inch (2.54 cm) or 150 characters per line can be printed.

Line Spacing Key (LINE SP)

This key is used for choosing the amount of paper that is fed each time the **RETURN** key is pressed, which in turn generates a linefeed command.

Each time the Line Spacing key is pressed, the indication will change "1", "1 1/2" and "2" in that order.

"1" Paper is fed one line for each linefeed command.

"1 1/2" Paper is fed one and a half lines for each linefeed command.

"2" Paper is fed two lines for each linefeed command.

- When the Platen Knob is rotated manually, each click moves the Platen one half line.

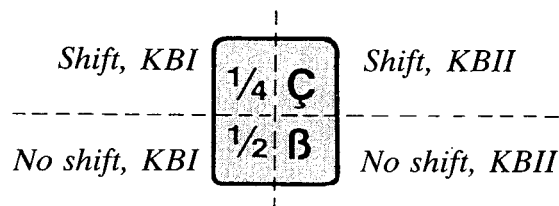
Keyboard Key (KB)

This key is used to switch between the characters and symbols contained on each key cap.

Each time this key is pressed, the indication will change "I" and "II" in that order.

"I" The characters and symbols on the left side of the key can be typed.

"II" The characters and symbols on the right side of the key can be typed.



- "Dead" keys

These five accent symbols (``^~) can only be used with the characters shown. They will not be printed until the character, which is to fall below, is pressed.

äëïöü	ÄËÏÖÜ
áéíóú	ÁÉÍÓÚ
àèìòù	ÀÈÌÒÙ
âêîôû	ÂÊÎÔÛ
āōñ	ĀŌÑ

C Using the LCD display

Cursor

When using the typewriter, you will see a square flashing symbol called the cursor.
The cursor lets you know where in the display you are typing at all times.

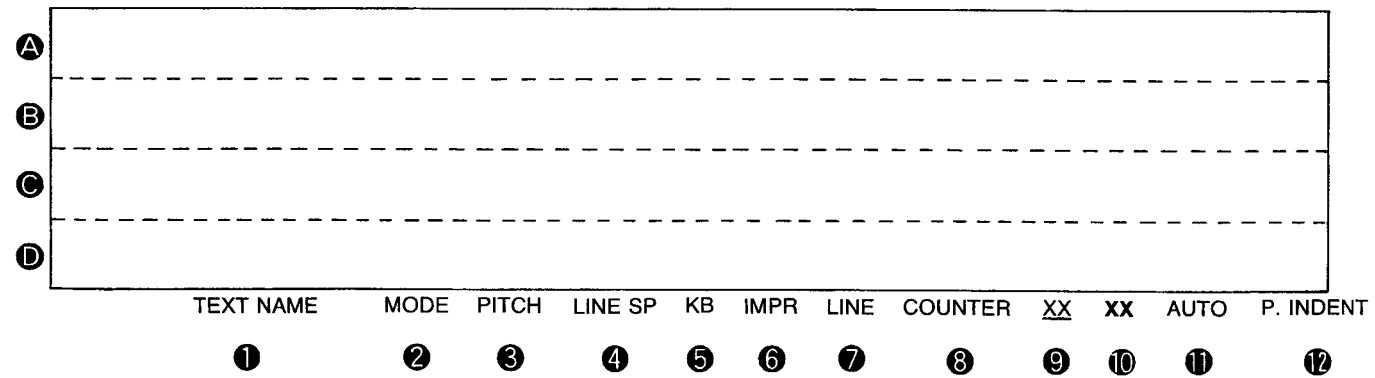
LCD display

Message Lines (A , B)

- These lines indicate various display messages. (On p. 88 and 89 you will find a listing of all the display messages.)
- When there is no message, the characters in the line preceding the line presently being typed or edited are displayed.

Editing Lines (A ~ D)

Typed characters or characters called from the memory are displayed on these lines.
Characters can be edited (inserted, deleted or corrected) on these lines before they are printed.



Status Line Information (❶ ~ ❷) Line (❸)

- ❶ The display will show the Phrase No.(1-20), text name (maximum 10 characters) or Record No.(1-100) being used in Memory Mode.
- ❷ Each time the **MODE** key is pressed, the **MODE** indicator will display “TPW”, “L/L” or “JST” in that order.
- ❸ Each time the **PITCH** key is pressed, the **PITCH** indicator will display “10”, “12” or “15” in that order.
- ❹ Each time the **LINE SP** key is pressed, the **LINE SP** indicator will display “1”, “1½” or “2” in that order.
- ❺ Each time the **KB** key is pressed, the **KB** indicator will display “I” or “II” in that order.
- ❻ The **CODE+L** keys select the typing impression and the **IMPR** indicator will display “L”, “M” or “H”. (Refer to p. 34.)
- ❼ In Text edit Mode, the line number is displayed.
- ❽ This indicates the remaining number of characters that can be typed on the line.
- ❾ The **CODE+U** keys select the continuous underlining function. (Refer to p. 27.)
The display will show “C” above the underline indicator.
The **CODE+W** keys select the word by word underlining function. (Refer to p. 27.)
The display will show “W” above the underline indicator.
- ❿ The **CODE+B** keys select the bold print function. (Refer to p. 27.)
The display will show “ ▼ ” above the bold indicator.
- ⓫ The **CODE+A** keys select whether a carriage return is made automatically or manually in the “Hot Zone”. (Refer to p. 29.)
The display will show “ ▼ ” above the auto indicator.
- ⓬ The **CODE+I** keys select the paragraph indent function. (Refer to p. 32.)
The display will show “ ▼ ” above the indent indicator.
- * The typewriter remembers the last Typing Mode, keyboard, Pitch, Line Spacing and Typing Impression selected.
The typewriter is preset to “TPW”, “KBI”, 10 Pitch, single (1) Line Spacing and Typing Impression “L” when it is purchased.

D Function Keys

Margin Release Key (MAR REL)

Releases left and right margins.

Tab Key (TAB)

Moves the carriage to the next tab position or to the right margin.

Left Margin Key (L MAR)

Sets the left margin at the current carriage position.

Right Margin Key (R MAR)

Sets the right margin at the current carriage position.

Tab Set Key (TAB SET)

Sets TAB stops.

Tab Clear Key (TAB CLR)

Clears individual TAB stops. Also clears all tabs when used with the **CODE** key.

Shift Lock Key/Shift Indicator (LOCK)

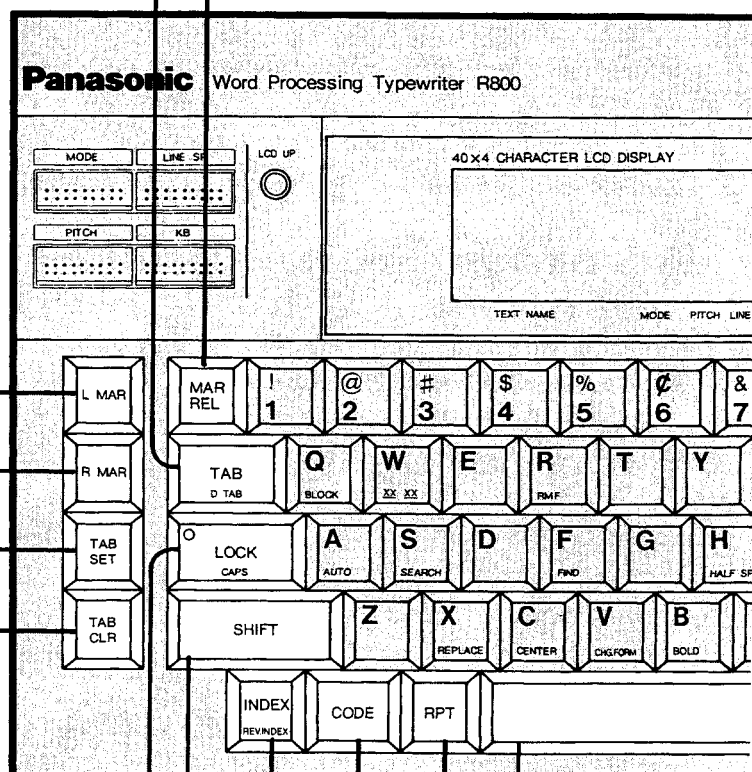
Pressing down this key creates the shifted condition so that capital letters or symbols on the top part of keys can be printed successively. Pressing the **SHIFT** key terminates the shifted condition.

• Shift Indicator

Illuminated during the shifted condition.

Shift Key (SHIFT)

Pressing a character key while holding down this key causes the capital letter or the symbol on the top part of the key to be printed.



Space Bar

Moves the carriage one space toward the right.

• Repeat Key (RPT)

Repeats all character and spacing keys.

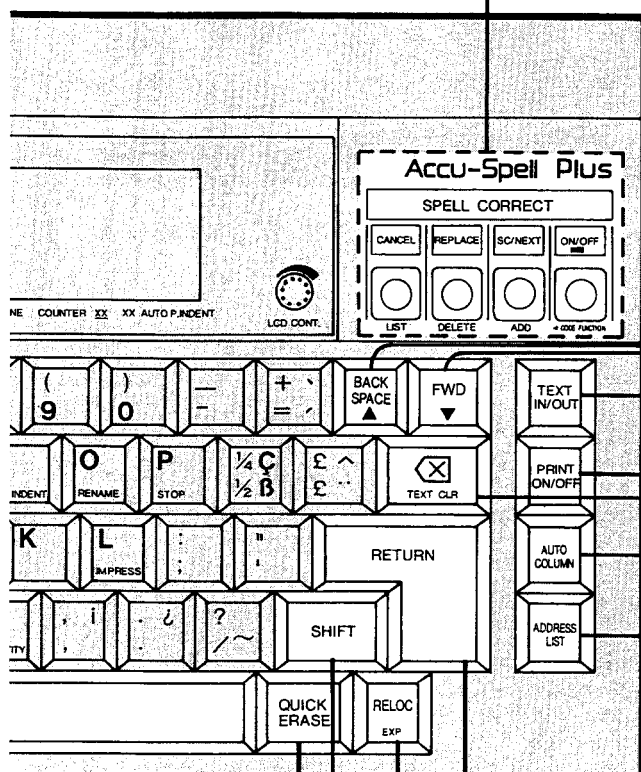
• Code Key (CODE)

Command key for automated functions used in conjunction with other keys.

• Index/Reverse Index Key (INDEX/REV. INDEX)

Moves the paper up $\frac{1}{2}$ line. Also moves paper down $\frac{1}{2}$ line when used with **CODE** key.

Accu-Spell Plus Keys
Refer to page 75.



• **Backspace Key (BACKSPACE)**

Moves the carriage/cursor one space toward the left. Moves the cursor on the display one character toward the right.

Displays the prior text name in text mode.

• **Forward Key (FWD)**

Moves the information on the display one character toward the left.

Displays the next text name in text mode.

• **Text Key (TEXT IN/OUT)**

Allows you to enter information into memory and/or recall that text onto the display for modification.

• **Print Key (PRINT ON/OFF)**

Instructs the typewriter to start/stop printing documents or phrases stored in memory.

• **TEXT CLR Key (X)**

Deletes characters from paper, display and memory.

• **Auto Column Key (AUTO COLUMN)**

Instructs the typewriter to make a table.

• **Address List Key (ADDRESS LIST)**

Instructs the typewriter to make an Address List.

• **Return Key (RETURN)**

Moves the carriage to the left margin of the next line.

• **Relocate/Express Key (RELOC/EXP)**

Moves the carriage next to the last printed character. (When you press this key after correcting errors on any previous line, the carriage moves next to the last printed character on the end of the lines so that you can continue typing with no delay.)

Moves the carriage to the beginning of the line without line spacing when used with the **CODE** key.

• **Shift Key (SHIFT)**

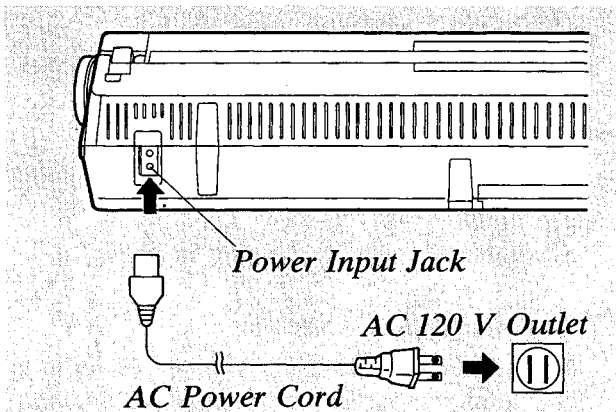
• **Quick Erase Key (QUICK ERASE)**

Allows you to erase one word at a time.

1-2 POWER SUPPLY

A Using Household AC Power

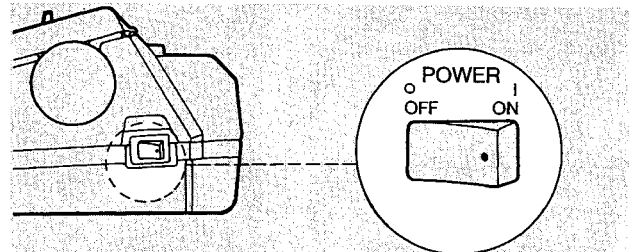
Connect the AC Power Cord to the Power Input Jack on the unit and a Household AC 120 V Outlet.



If you will not be using the typewriter for several days, unplug the Power Cord after turning off the **POWER switch. About 3 watts are consumed even while the **POWER** switch is turned off.*

B Power Switch

When the **POWER** switch is turned "ON", the carriage will move to the left margin which was previously set. The unit is now ready for typing.



C Memory Back-up Function

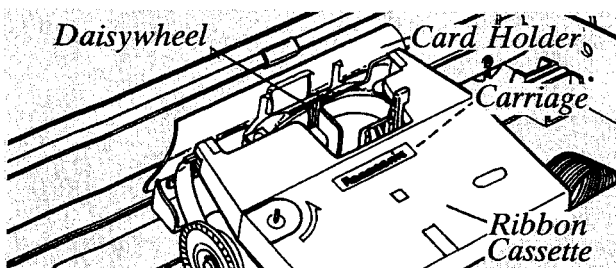
The following information will be stored even after the **POWER** switch is turned off:

- Stored Text
- Stored Phrase
- Margins
- Typing Impression
- Tabs
- Stored Dictionary
- Stored Address List
- Selector Mode

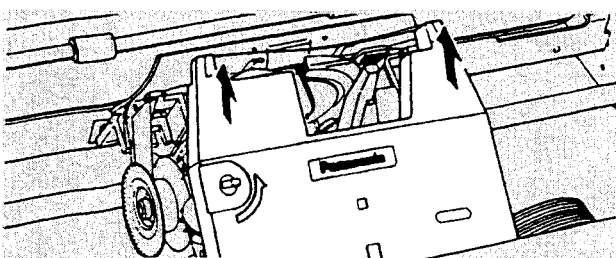
The built-in lithium battery that is used to retain these functions can be used for about 5 years.

1-3 CHANGING THE RIBBON CASSETTE

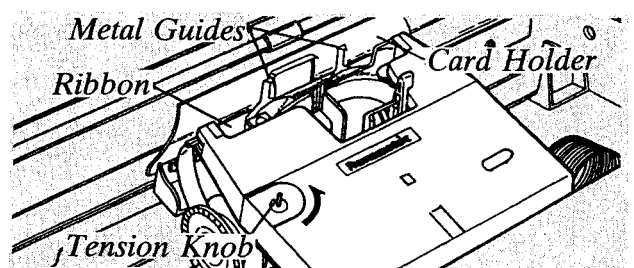
- 1 Lift the Top Cover, and you will see the carriage, ribbon cassette and daisy-wheel.



- 2 Hold the ribbon cassette on both sides and lift up the front portion (where the ribbon is exposed) to remove.



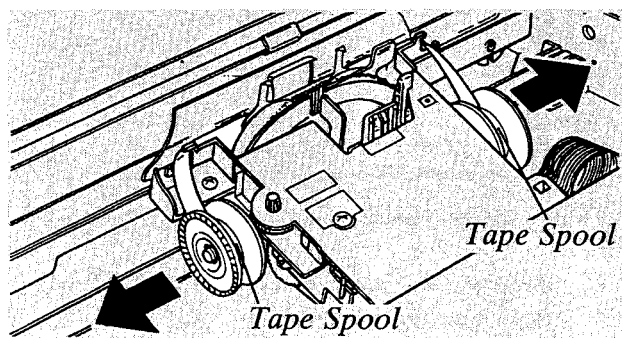
- 3 To insert a new cassette, place the back end of the cassette on the cassette holder on the carriage and snap the front portion of the cassette onto the carriage.



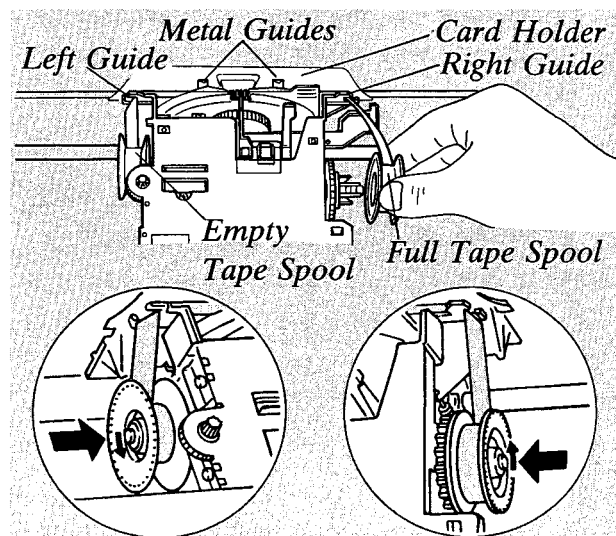
- 4 Advance the tension knob on the cassette counter-clockwise until the ribbon slack is tightened.

1-4 CHANGING THE CORRECTION TAPE

- 1 To replace the correction tape, lift out the typing ribbon cassette (see "1-3 CHANGING THE RIBBON CASSETTE") and remove the two spools of the lift-off tape by pulling them outwards.



- 2 Place the empty spool of new tape on the left pin so that the tape winds counter-clockwise. Place the tape around the left guide and behind both metal guides. Pull the tape around the right guide and place the loaded spool on the right pin so that the tape unwinds counter-clockwise.



- 3 Manually turn the left-hand spool in the counter-clockwise direction, tightening the tape until resistance is felt.
- 4 Replace the typing ribbon cassette.

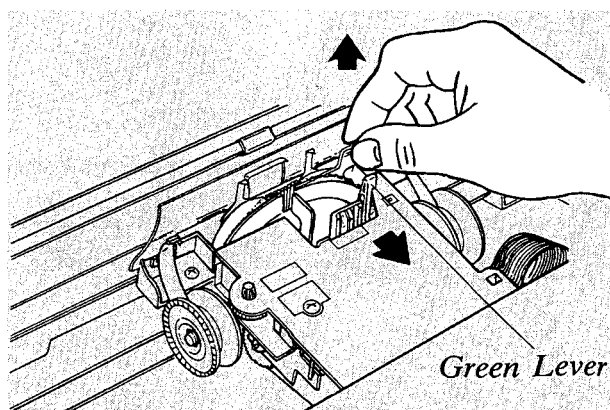
**After exchanging the correction tape, confirm that the correctable side of the tape faces toward the platen.*

1-5 CHANGING THE DAISYWHEEL

You can remove the daisywheel without removing the ribbon cassette.

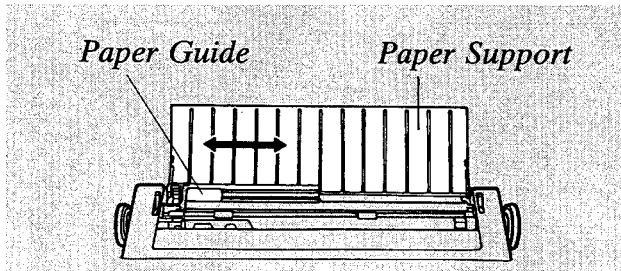
You will see a green lever on the right side of the carriage. Pull this lever toward you and lift out the plastic cartridge of the daisywheel.

To insert the daisywheel, place the plastic cartridge in the carriage with the characters facing toward the platen. Push the green lever back into position.

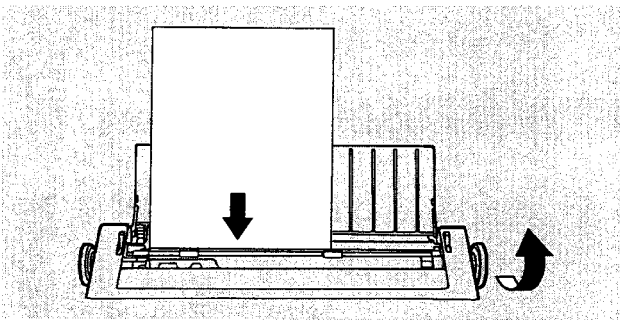


1-6 INSERTING THE PAPER

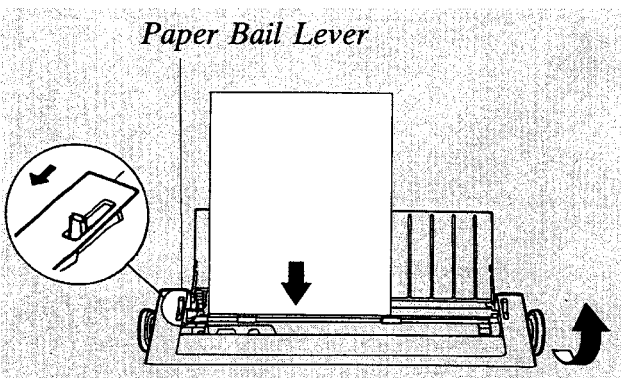
- 1** Open the Paper Support and position the Paper Guide for the size of the paper you are using. (The Paper Guide is located on the Paper Support and slides laterally.)



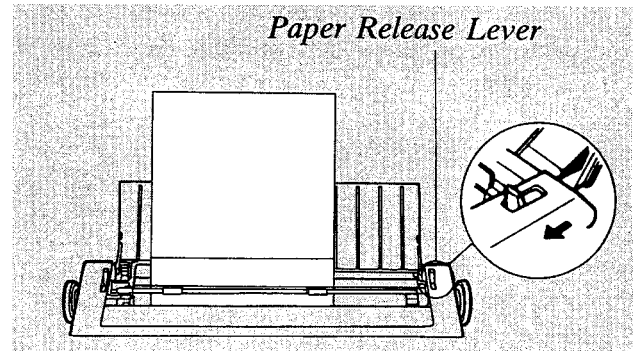
- 2** Insert the paper straight under the back of the Platen.



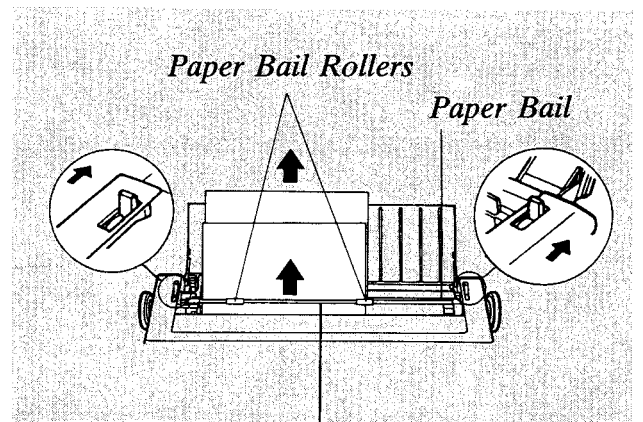
- 3** Pull the Paper Bail Lever towards you. While keeping the left edge of the paper in line with the Paper Guide, turn the Platen Knob until the paper appears at the front of the Platen.



- 4** Feed the paper underneath the Paper Bail, pull the Paper Release Lever, and adjust the paper so that both right and left edges are aligned.



- 5** Return the Paper Release and the Paper Bail Levers to their original positions and then position the Paper Bail Rollers to secure the paper.



Proper printing and correction will not be possible if there is any slack in the paper. Hold the paper by the top edges and pull up to remove any slack.

2-1 USING THE TYPEWRITER

This section introduces you to the fundamental operations of your Panasonic Typewriter. Read through it and do the exercises to familiarize yourself with each operation.

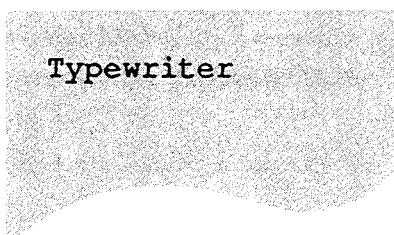
A Procedure for Typing

- 1** *Open the Top Cover and confirm that the ribbon cassette, correction tape and daisywheel are properly installed on the carriage. Remove the Ribbon Cassette Stopper and the Carriage Stopper if you have not already done so.*
- 2** *Turn on the **POWER** switch.
The typewriter remembers the last margin format you used and moves the carriage to the stored left margin.
*Confirm that the Pitch Selector is set to the pitch of the daisywheel you are using.
The display shows the number of characters available on the writing line, typing mode, pitch, keyboard, typing impression, etc. on the 4th line.*
- 3** *Insert the paper behind the platen and rotate the Platen Knob to feed the paper to the desired position.*

Now you can begin typing.
- 4** *Type the following characters.*

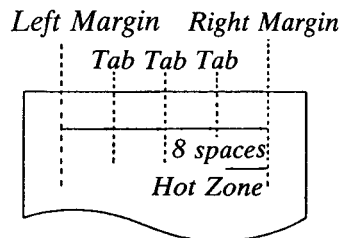
Typewriter

- When the Typing Mode is set to the “TPW”, the characters will be printed on the paper immediately.
- When the Typing Mode is set to the “L/L” or “JST”, the characters will only appear on the display.
Press the **RETURN** key to print them.
- The characters will be printed on the paper as follows.



You will now learn how to use the typewriter to perform simple operations. Read the following descriptions thoroughly in order to make the most use of the splendid functions of the typewriter.

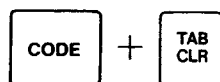
B Margin Formats



When you turn on the **POWER** switch, the margin format (margins and tabs) which were previously stored will be automatically set.

If you want to change this margin format, simply do the following:

To Clear Tabs

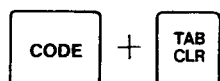


Press the **CODE+TAB CLR** keys.

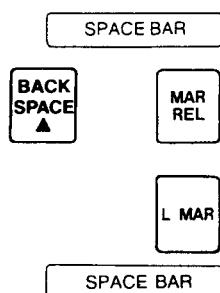
The carriage moves to the left margin and clears all of the tabs.

• Should you want to change an individual tab stop, press the **TAB** key to move the carriage to the tab position to be cleared, and press the **TAB CLR** key. To set a tab stop, press the **TAB SET** key when the carriage is at the desired position.

To Set Margins and Tabs



- 1 Clear the current tabs.
Refer to "To Clear Tabs".



- 2 Press the **SPACE BAR** or the **BACKSPACE** key to move the carriage to the desired left margin position. If necessary, press the **MAR REL** key to by-pass a previously set margin.

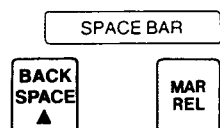
- 3 Press the **L MAR** key to set the left margin.

- 4 Press the **SPACE BAR** until you reach the first desired tab stop.



- 5 Press the **TAB SET** key to set the first tab stop.

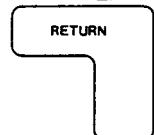
- 6 Repeat steps 4 and 5 for each required tab stop.
Remember that the maximum number of tab stop is 13.
If you have entered more than 13 tab stops of the display will show "TOO MANY TAB STOPS!".



- 7 Press the **SPACE BAR** or the **BACKSPACE** key to move the carriage to the desired right margin position. If necessary, press the **MAR REL** key to by-pass a previously set margin.



- 8 Press the **R MAR** key to set the right margin.



- 9 Press the **RETURN** key to move the carriage to the left margin on the next line.

Example: Set the margins and tabs as follows:

- ① Set the left margin at 15
- ② Set the first tab stop at 30
- ③ Set the second tab stop at 45
- ④ Set the third tab stop at 60
- ⑤ Set the right margin at 75

C Hot Zone

The "Hot Zone" represents the number of spaces between the buzzer and the last character at the right margin. When the carriage enters the "Hot Zone", you will hear the buzzer which indicates that the right margin is approaching. (It is pre-programmed in the machine at 8 spaces from the right margin. Refer to p. 18.)

D Using the Display

This typewriter has a 4-Line by 40-Character Adjustable-Angle LCD display which acts as an operator prompt, allowing you to correct, edit, move or delete information.

When typing, most errors are "felt" by the operator. Through the use of the display, you can check if there are errors and correct them before they are printed.

In order to display text, your Typing Mode must be set to the "L/L" or "JST".

Display Messages

The display will give you certain messages to guide you through your projects. As you proceed through the exercises in this manual, these messages will become second nature to you.

(On p. 88 and 89 you will find a listing of all the display prompts.)

Display Symbols

As you begin the exercises, you will see various symbols on the display. These symbols indicate certain functions and are listed below to help you understand what you are seeing.

You are not expected to memorize these symbols. As you proceed through this book, you will become familiar with them and understand how they relate to the various functions you are asking your typewriter to perform.

- C** Centering
- D** Decimal Tabulation
- S** Stop Code
- R** Right Margin Flush
- ↓ Index Command
- ↑ Reverse Index Command
- Half Space
- Micro-Pitch Spacing
- { Open/Close of Block Move, Copy or Delete
Separate Mark
- ≡ Paragraph Indent
- = Temporary Hyphen
- Permanent Space
- Tab Command
- ▶ Continuous Underline Mode Start
- ◀ Continuous Underline Mode End
- ▶ Word by Word Underline Mode Start
- ◀ Word by Word Underline Mode End
- █ Cursor

◀ Exist information towards the left of this line

↵ Manual Return

▣ Bold Mode Start

◀ Bold Mode End

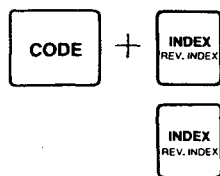
E Index and Reverse Index

The **INDEX** key allows you to move the paper $\frac{1}{2}$ line toward the bottom of the page.

The **CODE+INDEX** keys allow you to move the paper $\frac{1}{2}$ line toward the top of the page.

These keys are used for the typing of superscripts (e.g. 10^3) and subscripts (e.g. $\log_{10} 1000$). You will also use them during correction.

The 4th of July is Independence Day.

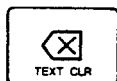




- 1 To type this sentence, you would first enter "The 4" and then:
- 2 Press the **CODE+INDEX** keys and type "th".
- 3 Press the **INDEX** key to reposition the carriage on the actual typing line.
- 4 Continue typing. To type subscript, reverse the keystroke order.


F Correction

This typewriter has a 3-line correction memory so you can easily edit the characters on the current and 2 previous lines.

To Correct Errors on the Current Line



- 1 To erase the last printed character on the current line;
Press the **TEXT CLR** () key to "lift" the incorrect character off the paper. If you press the **TEXT CLR** () key again or the **RPT** key the next character will be erased.

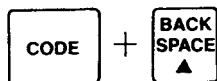
• To erase characters towards the beginning of the line, press the **CODE+RELOC** keys, the **SPACE BAR** or the **BACKSPACE** key and position the carriage so that the character to be erased is aligned between the two vertical lines on the top of the Card (Plastic) Scale. Press the **TEXT CLR** () key.

- 2 Type the correct characters.



- 3 Press the **RELOC** key after making the correction to move the carriage back to the end of the line.

To Correct Errors in the Previous Line

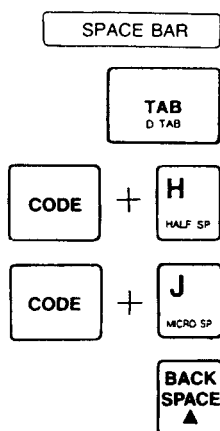


- 1 To erase characters in the previous line;
Press the **CODE+BACKSPACE** keys.
The display will show:

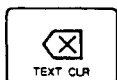
PREVIOUS LINE EDIT

The characters in the previous line will be displayed and the carriage will move to the end of that line.

- The changing of print modes such as Bold Print etc. is not permitted.



- 2 Press the **SPACE BAR**, **TAB**, **CODE+H**, **CODE+J** or **BACKSPACE** key to position the carriage over the error.



- 3 Press the **TEXT CLR** () key.

- 4 Type the correct characters.

*Insertion of the characters is possible to the end of the line.

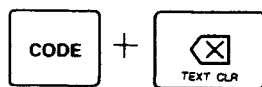
If you attempt to go back 3 lines using the **CODE+BACKSPACE** keys, the display will show for about one second;


OUT OF CORRECTION MEMORY

At this time, please see "To Make Manual Corrections".

To Make Manual Corrections

To erase characters:

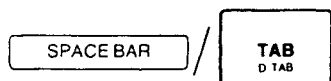


- 1 Press the **CODE+TEXT CLR** () keys.
This instructs the typewriter to enter the Manual Correction Mode.
The carriage will automatically move to the left margin to allow you to begin making corrections.
•The display will show:

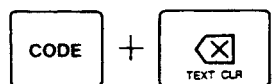
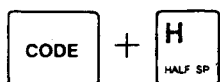
MANUAL CORRECTION




- 2 Press the **CODE+INDEX** keys to position the carriage on the line with the error.



- 3 Press the **SPACE BAR**, **TAB**, **CODE+H**, **CODE+J** or **BACKSPACE** key to position the carriage over the error.



- 4 Press the **CODE+TEXT CLR** () keys.

- 5 Retype the incorrect character.
This will lift the character off the paper.

- 6 Type the correct character.
•Repeat steps 2-6 to correct errors on another line.
•Repeat steps 3-6 to correct another character on the same line.



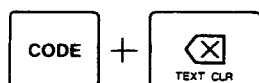
- 7 Press the **RELOC** key.
This will position the carriage to the end of the last line.

•The message “MANUAL CORRECTION” will disappear from the display.

Disabling Print When Making Manual Corrections

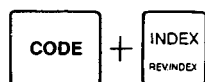
The **PRINT** key may be used to make manual corrections.

This feature is especially helpful when correcting in the Justify Printing Mode or making many corrections successively.



- 1 Press the **CODE+TEXT CLR** () keys.
The carriage will automatically return to the left margin.
• The display will show:

MANUAL CORRECTION



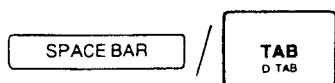
- 2 Press the **CODE+INDEX** keys to position the carriage at the beginning of the line on which the correction is to be made.



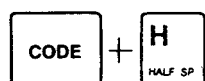
- 3 Press the **PRINT** key.
The display will show:

MANUAL CORRECTION

NO PRINT



- 4 Press the **SPACE BAR**, **TAB**, **CODE+H**, **CODE+J**, or **BACK-SPACE** key to position the carriage on the error.




- 5 Retype the error.

This information has now been entered back into memory but has not reprinted on paper.



- 6 Press the **PRINT** key.
• The message "NO PRINT" will disappear from the display.




7 Press the **TEXT CLR** () key to delete the entered characters.

8 Type the correct character.
 • Repeat steps 2-8 for each error to be corrected.



9 Press the **RELOC** key.
 This will position the carriage to the right of the character printed last before correction.
 • The message “MANUAL CORRECTION” will disappear from the display.

In the Justify Printing Mode:

- Perform the steps 1-2.
- Press the **PRINT** key.
- Retype the entire line with the error, and continue typing the line until the carriage reaches the right margin. It is necessary to type beyond the error line so that the typewriter can perform its justification.
- Press the **BACKSPACE** or **SPACE BAR** to position the carriage on the error.
- Press the **TEXT CLR** () key to delete the error.
- Type the correct characters.
- Press the **PRINT** or **RETURN** key.

To Make Corrections on the Display

With the Typing Mode set to "L/L" or "JST", each character typed will appear on the display. When typing, most errors are "felt" by the operator. Through the use of the display, you can visualize the error and correct it before it is printed on paper. As you type, the descending line counter will count down for each character key depression letting you know how many more characters may be entered on the current line.

Enter the following information including the errors. Do not press the RETURN key at the end of the line.

"Errors are corrected before teh y are printed on paper."

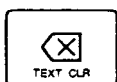
The display will show:


ected before teh y are printed on paper. █



- 1 Press the **BACKSPACE** key to position the error to the left of the cursor.

Errors are corrected before teh y are pri



- 2 Press the **TEXT CLR** () key to delete the incorrect characters.

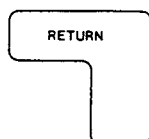
Errors are corrected before ty are print

- 3 Enter the correct characters.

Errors are corrected before they are pri



- 4 Press the **FWD** key to move toward the next error or to the end of the line.

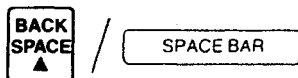


- 5 Press the **RETURN** key to print the information you have typed.

• If the error is located toward the beginning of the line, you may use the **CODE+RELOC** keys instead of the **BACKSPACE** key. To reposition the carriage at the end of the line, use the **RELOC** key instead of the **FWD** key.

To Erase One Word at a Time

The **QUICK ERASE** key may be used to speed up correction by deleting one word on the paper or the display at a time. The cursor must be on the space immediately following the word to be deleted.



1 Press the **BACKSPACE** key or the **SPACE BAR** to locate the last character of the word to be deleted.

• If you have pressed the **SPACE BAR** after typing an incorrect word, make sure to press the **BACKSPACE** key before pressing the **QUICK ERASE** key.



2 Press the **QUICK ERASE** key.

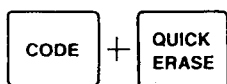
3 Retype the correct word.

To Erase One Line at a Time

This function may be used to speed up correction by deleting one entire line on the page or the display at once.



1 Press the **BACKSPACE** key or the **SPACE BAR** to located the last character of the line to be deleted.



2 Press the **CODE+QUICK ERASE** keys.
The typewriter will delete an entire line at a time.

• If you want to stop deleting information in the middle of the line, press the **PRINT** key.

The display will show:

CONTINUE Y/N?

To continue deleting:

Press the **"Y"** key.

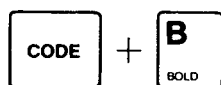
To exit the deleting command:

Press the **"N"** key.

3 Retype new information.

G Bold Print

You can instruct the typewriter to “highlight” certain words or characters for emphasis by using the bold print function.



- 1 Press the **CODE+B** keys.
 - The mode status indicator (▼) of “BOLD” is displayed.

- 2 As you typed the characters, they will be printed in bold face.



- 3 Press the **CODE+B** keys again to cancel the command.

• When the Typing Mode is set the “L/L” or “JST”, the symbol “▶” is displayed in front of and the symbol “◀” is displayed behind the characters to be bold.

H Underlining

You can instruct the typewriter to “underline” certain words or characters for emphasis by using the underlining function.

Continuous Underlining



- 1 Press the **CODE+U** keys.
 - The display will show “C” of “Continuous Underlining” on the bottom of the display.

- 2 Type your information. All characters and spaces will be underlined.



- 3 Press the **CODE+U** keys again to cancel the command.

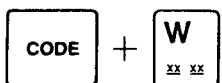
• When the Typing Mode is set the “L/L” or “JST”, the symbol “▶” is displayed in front of and the symbol “◀” is displayed behind the characters to be underlined.

Word by Word Underlining



- 1 Press the **CODE+W** keys.
 - The display will show “W” of “Word by Word Underlining” on the bottom of the display.

- 2 Type your information. Only character(s) will be underlined.
 - Spaces will not be underlined.



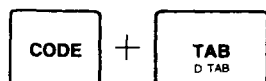
- 3 Press the **CODE+W** keys again to cancel the command.

• When the Typing Mode is set the “L/L” or “JST”, the symbol “▶” is displayed in front of and the symbol “◀” is displayed behind the characters to be underlined.

I Decimal Tabulation

You may use the **CODE+TAB** keys in place of the **TAB** key when typing statistical formats. The typewriter will automatically align decimal points at the preset tab stops and eliminates the need to space to the correct starting position in a column.

This function also can be used when typing formats which include characters.



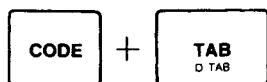
1 Set your tab points as explained on p. 18.

2 Press the **CODE+TAB** keys.
The carriage will move to the first tab position and the display will show:

DECIMAL TABULATION

3 Enter the numbers and decimal point. The entry can be seen on the display.


DECIMAL TABULATION
123.64



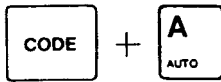
4 Press the **CODE+TAB** keys.

The first column will be printed so that the decimal point is positioned on the tab stop and the carriage will move to the next tab position.

Repeat the above two steps until you have completed all of your column entered.

- After entering the last number, press the **RETURN**, **TAB** or **PRINT** key to execute printing.
- To terminate the Decimal Tabulation command, which "DECIMAL TABULATION" is on the display as shown in steps 2 and 3, press the **TEXT CLR** () key.

J Carriage Return (NORM·AUTO)



The **CODE+A** keys select when a carriage return operation is performed.

NORM Printing stops at the right margin.

Carriage return must manually be pressed.

AUTO When typing a character after entering a “Hyphen” or “Space” within the “Hot Zone”, the carriage automatically returns to the left margin or the paragraph indent position of the next line.

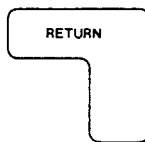
- The mode status indicator (▼) of “Automatic Carriage Return” is displayed.

- To reset Carriage Return Mode, press the **CODE+A** keys again.
- **NORM** is selected when the typewriter is powered on.

K Centering

Your typewriter has four ways to center information; between margins, between tab stops, over a specified point and Auto Half Space.

Between Margins



1 Press the **RETURN** key to position the carriage at the left margin.

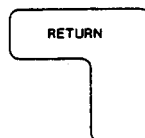


2 Press the **CODE+C** keys to move the carriage to the center of the margins. The display will show:

CENTERING

3 Enter the information to be centered.
The characters will appear on the display.

CENTERING
Centering█



4 Press the **RETURN**, **TAB** or **PRINT** key.
The information entered will be printed between the margins and the Centering command will be cancelled.

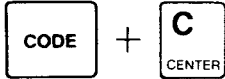


*When the indent function is in operation, centering is performed between the indented position and the right margin.

Between Tab Stops



- 1 Press the **TAB** key to position the carriage at the left tab position of the column you want to center in.

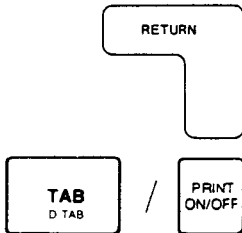


- 2 Press the **CODE+C** keys to move the carriage to the center of the tab stops.
The display will show:

CENTERING

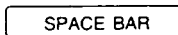
- 3 Enter the information to be centered.
The characters will appear on the display.

CENTERING
Centering█

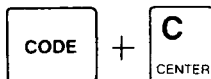


- 4 Press the **RETURN**, **TAB** or **PRINT** key.
The information entered will be printed between the tab stops and the Centering command will be cancelled.

Over a Specified Point

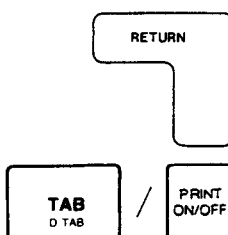


- 1 Press the **SPACE BAR** to move the carriage to the desired position.



- 2 Press the **CODE+C** keys then enter the information. The display will show:

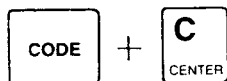
CENTERING
Centering█



- 3 Press the **RETURN**, **TAB** or **PRINT** key.
The information entered will be printed and the Centering command will be canceled.

Auto Half Space

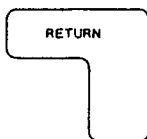
You can automatically correct a word within memory with one that has one character more or any amount of characters less than the original word.



- 1 Locate the carriage on the error.
- 2 Press the **TEXT CLR** () or **QUICK ERASE** key to delete the incorrect characters.
- 3 Press the **CODE+C** keys to activate the Auto Half Space.
The display will show:

CENTERING

- 4 Type the correct characters.
- 5 Press the **RETURN** key.
The characters entered will be printed.



L Right Margin Flush

This command instructs the typewriter to print the information with the last character of each line aligned at the right margin.

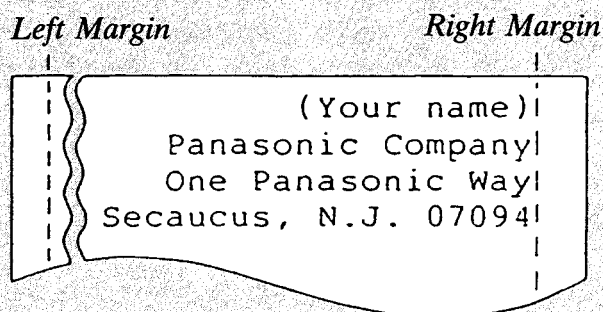
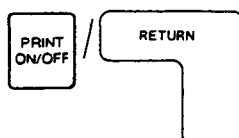
You can use this function to conveniently type dates or addresses.



- 1 Press the **CODE+R** keys to move the carriage to the right margin.
The display will show.

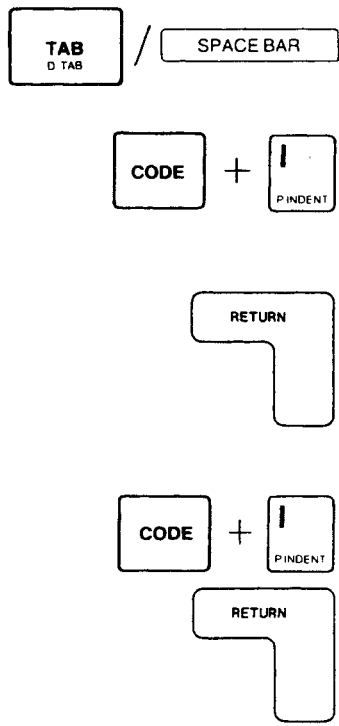
RIGHT MARGIN FLUSH

- 2 Enter the information. The information will be shown on the display.
- 3 Press the **PRINT** or **RETURN** key.
The characters will be printed with the last character Right Margin Flush. The command will then be cancelled.

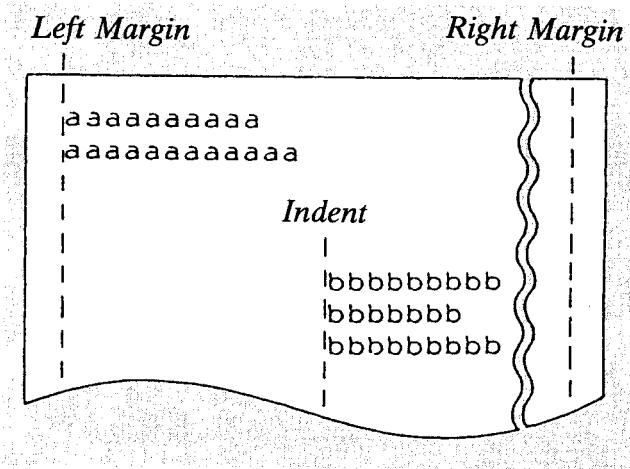


M Paragraph Indent

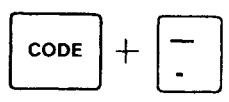
This command provides you with the ability to set a temporary left margin and eliminates the need to position the carriage to an indented location on every line.



- 1 Press the **TAB** key or the **SPACE BAR** to move the carriage to the desired indented position.
- 2 Press the **CODE+I** keys.
This sets the indented (temporary left margin) position.
•The mode status indicator (▼) of "Paragraph Indent" is displayed.
- 3 Type the characters.
Press the **RETURN** key to move the carriage to the indented position on the next line.
Continue typing.
- 4 Press the **CODE+I** keys again to cancel the command.
The carriage will move to the original left margin when the **RETURN** key is pressed.



N Permanent Hyphen



If you press the **CODE+HYPHEN (-)** keys within the "Hot Zone", when the automatic carriage return is activated, the typewriter will continue printing without generating an automatic return. This coded hyphen is called a "Permanent Hyphen". It is indicated by the symbol "-" on the display and will be printed at the same point every time you print this text recalled from memory.

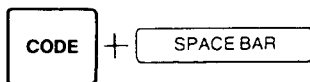
When you reach the end of a line, you may need to hyphenate a word to stay within your margin settings. In this case, press the "-" key and enter the next character. The hyphen will be printed and the carriage will automatically returns to the left margin of the next line. This hyphen which is used temporarily in the "Hot Zone", is called a "Temporary Hyphen". It is indicated by the symbol "—" on the display. If you change the margin setting, the hyphen will not be printed unless it falls within the "Hot Zone".

O Permanent Space

Since your typewriter allows you to print with automatic returns or with a justified margin, there may be times you do not want to separate characters or words. The typewriter allows you to set a "Permanent Space" between characters and will not separate them when printing with variable line lengths.

- 1** Type the first word.

New █



- 2** Press the **CODE** key+**SPACE BAR**.
The display will show:

New⁻ █

- 3** Type the second word.
The display will show:

New⁻York █

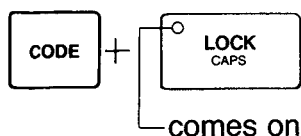
When the characters are printed, the typewriter will recognize the two words as one and will not separate them.

P Caps Lock

To set the unit for typing capital letters, lower case number, punctuation marks and symbols:

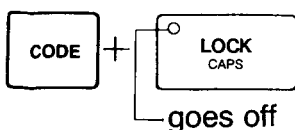
Press the **CODE**+**LOCK** keys.

In this mode, the **SHIFT** key will call for opposite characters to be entered.



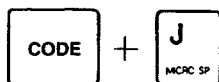
- 1** Press the **CODE**+**LOCK** keys.
The **SHIFT Indicator** will come on and the Caps Lock mode will be activated.

- 2** Type the text.



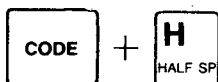
- 3** Press the **CODE**+**LOCK** keys again to cancel the command.
The **SHIFT Indicator** will go off and the Caps Lock mode will be cancelled.

Q Micro-Pitch Spacing



Pressing the **CODE+J** keys moves the carriage by 1/60 inch. You may use this function to “squeeze” characters together. The symbol “...” will appear on the display.

R Half Space



Pressing the **CODE+H** keys reduces the normal carriage spacing by one half. The symbol “..” will appear on the display.

S Typing Impression Control

This controls the impact of the printed characters. Select the impression level that is most suited for your needs.



Press the **CODE+L** keys.
The impression level “L”, “M” or “H” is displayed in that order.
“L” : Light
“M” : Medium
“H” : Heavy

Each times these keys are pressed, the typing impression level will change. A typing impression level of “L”, “M” or “H” can be selected.

*“L” is softer than “H”.

*At first, try impression level “L” and if you feel the impression level is too soft, try impression level “M” or “H”.

2-2 AUTO COLUMN

This function is used to make a table (ruled form). You can set between 2 and 12 columns and it will automatically center them between the left and right margins.

1 Set your margins and tabs as explained on p. 18.



2 Press the **AUTO COLUMN** key.
The display will show:

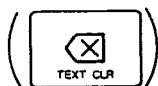
AUTO COLUMN


after one second, the display will show:

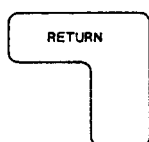
HOW MANY COLUMNS? 2-12

3 Enter the required number of columns. For example, enter 4.
The display will then show the number of columns and the maximum number of characters per column.

4 COLUMNS [MAX 12 CHR.]



*If you want to cancel the number, press the **TEXT CLR** () key and then enter the new number.*



4 Press the **RETURN** key.
First, a line of the designated width will be typed.
Next, the display will show:

INPUT HEADING Y/N?

("HEADING" indicates "Age", "N", "Smoker" and "No smoker" in the example on page 37.)



5 Press the "Y" key to type a heading.
The display will show:

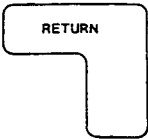
AUTO COLUMN
COLUMN: 1 [MAX 12 CHR.]



•Press the “ N ” key not to type a heading.
Go to step 10.

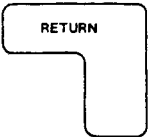
6 Type the heading for the first column.

AUTO COLUMN
COLUMN: 1 [MAX 12 CHR.]
Age



7 Press the **RETURN** or **TAB** key. The first column’s heading will be printed at the center of the column and the display will show:

AUTO COLUMN
COLUMN: 2 [MAX 12 CHR.]



8 Repeat steps 6 and 7, typing in “N”, “Smoker”, “No smoker”.
When the **RETURN** or **TAB** key is pressed after entering the heading of the last column, the display will show:

INPUT HEADING Y/N?
COLUMN: 4 [MAX 12 CHR.]



9 Pressing the “Y” key will allow you to enter an additional line to each column’s heading.
Repeat steps 6 and 7 for each column.



•Press the “N” key if you wish to begin entering each column’s data. A line equal to the width of the table will be typed beneath the heading, and the display will show:

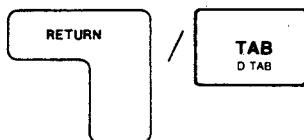
INPUT DATA
COLUMN: 4 [MAX 12 CHR.]

after one second, the display will show:

AUTO COLUMN
COLUMN: 1 [MAX 12 CHR.]

10 Type the data for each column.

```
AUTO COLUMN
COLUMN:  1 [MAX 12 CHR.]
Twenties
```



11 Press the **RETURN** or **TAB** key.
The data for the first column will be printed in the center of the column.

```
AUTO COLUMN
COLUMN:  2 [MAX 12 CHR.]
```

12 Repeat steps 10 and 11 and type all of the data.



13 Press the **AUTO COLUMN** key.
A line indicating the end of the table will be typed, the display will show:

```
AUTO COLUMN END
COLUMN:  1 [MAX 12 CHR.]
```

Age	N	Smoker	No smoker
Twenties	1,722	30	70
Thirties	2,012	37.1	62.9
Forties	1,928	35.5	64.5
Fifties	1,646	30.5	69.5

- Centering is performed in each column. However, if numerical data is typed a decimal point will take priority.

- The maximum width of one column is equal to 14 characters. Consequently, if there are only a small number of columns, table will appear at the center of the page without extending to the margins.

- In each column, a maximum of 12 characters can be printed. The number of characters is 2 characters less than the column width. If this number of characters is exceeded, the buzzer will sound and further input will not be accepted.

- If the margin is too small to print characters, the buzzer will sound and the display will show:

CHECK MARGIN WIDTH!!

Print-out will be prevented. In this case, select the number of columns again or reset the margin width.

- Accu-Spell Plus can be performed in the Auto Column Mode.

Misspelled words will not be printed even if the **RETURN** key is pressed. If you wish to print the word, press the **RETURN** key again.

- To perform left flush in a column, type the data and then hold **SPACE BAR** down until the buzzer will sound. When the **TAB** or **RETURN** key is pressed, the data will be printed left flush.

*While performing this function, do not change the pitch of the daisy-wheel.

3-1 MEMORY

Your typewriter has an internal memory of 27,000 characters which you can use to store phrases, texts or address list to be recalled as you wish.

The memory can be accessed in three different ways.

The first is which is referred to as "**Phrase Memory**", where you have quick access to the memory for storing commonly used phrases, addresses or paragraphs.

The second method is called "**Text Memory**", which is used for lengthy documents or projects requiring editing or repetitive printing.

The third method is called "**Address List Memory**", which is used for merging names, addresses and phone numbers or printing them.

When your typewriter has reached the maximum storage capacity of 27,000 characters, the buzzer will sound each time a key is pressed and the display will indicate the following:

MEMORY FULL!

At this time, you will be required to delete portions of the memory, which are no longer needed to continue with your current project. Deletion of memory contents will be discussed later in this manual.

3-2 PHRASE MEMORY

This typewriter will allow you to store twenty (20) separate phrases, which can be used for short blocks of data such as dates, standard paragraphs, signature blocks, etc.

Remember, the length of each phrase is limited by the total available memory of your typewriter.

Phrase Memory will accept;

Bold

Underline

Centering

Right Margin Flush

Phrase Memory will not accept;

Tab

Decimal Tabulation

Paragraph Indent

Stop Code

A To Store Information in the Phrase Memory

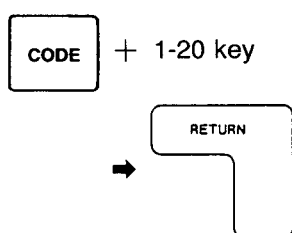
• *The way printing is performed depends on the typing mode:*

In the "TPW" mode;

As you type, the characters are printed on the paper.

In the "L/L" or "JST" mode;

*As you type, the characters are shown on the display and each line will be printed after the **RETURN** or **PRINT** key is pressed or an Automatic Return is performed.*



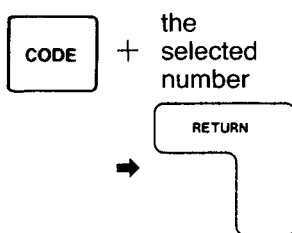
- 1** Press the **CODE+1-20** keys (the desired phrase memory No.).
For example, enter 1.
The display will show:

PHRASE 1 ■

*Press the **RETURN** key.*

The display will show the phrase number selected on the bottom of the display.

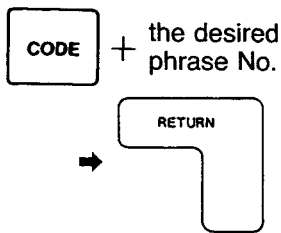
- 2** Enter the information to be stored.



- 3** Press the **CODE+1-20** keys and then **RETURN** key (the number selected in step 1) again to close the phrase block.

• *Repeat the above steps for storing information in other phrase memory block.*

B To Print from the Phrase Memory



1 Press the **CODE**+1-20 keys and then **RETURN** key (desired phrase memory No.).



2 Press the **PRINT** key.
The display will show:

TEXT PRINTING

•In the “TPW” mode:

The stored phrase will be printed continuously until it ends.

•In the “L/L” or “JST” mode:

The stored phrase will be printed continuously as long as each line reaches the right margin. When a line does not reach the right margin, the line will not be printed until the **PRINT** or **RETURN** key is pressed.

•Should you want to start printing from any position, other than beginning of the phrase, press the **BACKSPACE** or **FWD** key to move to the first character to be printed and press the **PRINT** key.

•The typewriter will start printing your phrase from the current carriage position.

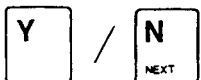
•When you want to print a phrase with Centering or Right Margin Flush, you must insert those codes at the top of the phrase.

C To Stop Printing in the Middle of a Phrase



1 Press the **PRINT** key to stop printing.
The display will show:

CONTINUE Y/N?

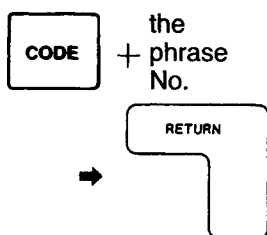


2 To continue printing:
Press the “Y” key.
To exit the printing command:
Press the “N” key.



•Pressing the **CODE**+**RELOC** keys clears the **PRINT** command and moves the carriage to the beginning of the phrase.

D To Modify a Phrase

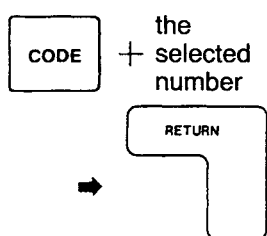


- 1 Press the **CODE+1-20** keys (memory number of a phrase to be modified) and then **RETURN** key.
The characters of the top of the recalled phrase will be shown on the third line of the display.

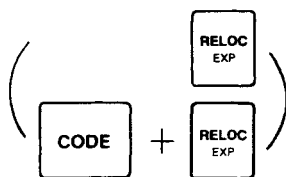


- 2 Press the **FWD** or **BACKSPACE** key to position the last character of the word to be modified.

- 3 Modify your text.



- 4 After your modifications have been made:
Press the **CODE+1-20** keys (phrase number entered in step 1) and then **RETURN** key to close your modified phrase.



- If the part to be modified is located toward the end of the phrase, press the **RELOC** key to position yourself at the end of the phrase. To return top the beginning of the phrase, press the **CODE+RELOC** keys.

- When modifying a phrase, additional information will not be printed on the paper. You must go to the beginning of the phrase and press the **PRINT** key.

E To Scroll through Phrase Memory

There are several ways of locating characters within a phrase to make additions, deletions or corrections. Two of these ways are called "scrolling".



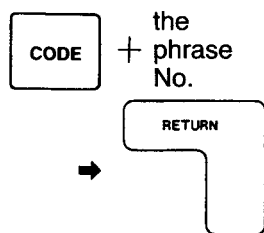
- (A) Pressing the **CODE+FWD** keys allows you to scroll forward through the first few characters of each line.



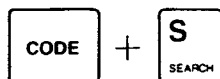
- (B) Pressing the **CODE+BACKSPACE** keys allows you to scroll backward through the first few characters of each line.

You can also use this function to scroll through text memory.

F Direct Search to a Particular Point



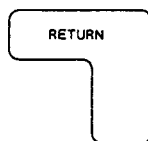
- 1** Press the **CODE**+1-20 keys (memory number of a phrase to be searched) and then **RETURN** key.
The characters of the top of the recalled phrase will be shown on the third line of the display.



- 2** Press the **CODE**+**S** keys. The display will show:

SEARCH-WORD= █

- 3** Enter the word(s) (maximum of 20 characters) you are searching for.



- 4** Press the **RETURN** key.
On the display, the last character you entered in the Search Command will be positioned to the left of the cursor.
•If the word is not found in the phrase, the display will show:

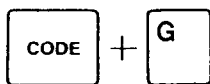
NOT FOUND!!



- To locate the next occurrence of the entered word within the phrase, press the **CODE**+**N** keys.

G To Disable the Status Line Information in Text Mode

To disable or hide the status line (in Text Mode):



Press the **CODE+G** keys.

Your Text will display without the status information and you will be able to see all of your Text on the 4th line.

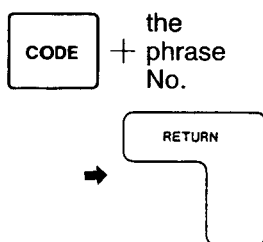
To display the various information, press the **CODE+G** keys again.

[various information]

- Phrase No.
- Text name
- Record No.
- Typing Mode
- Pitch
- Line Spacing
- Keyboard Indication
- Typing Impression Level
- Counter
- Underlining Indication (C, W)
- Bold Indication (▼)
- Auto Carriage Return Indication (▼)
- Paragraph Indent Indication (▼)

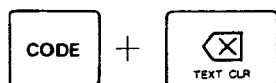
You can also use this function in the Text and Address List Memory editing mode.


H To Clear a Phrase from Memory



- 1 Press the **CODE+1-20** keys (memory number of a phrase to be cleared) and the **RETURN** key.

The characters of the top of the recalled phrase will be shown on the third line of the display.



- 2 Press the **CODE+TEXT CLR** () keys.
The display will show:

CLEAR THIS PHRASE Y/N?



- 3 Press the "Y" key for yes.
Press the "N" key for no.

3-3 TEXT MEMORY

- The Text Memory allows you to enter documents which would required revisions, repetitive print-out, insertion of variable information or width changes. With this memory you may store documents that are either short or lengthy.
- You can also enter special functions such as Tab, Decimal Tabulation and Paragraph Indent commands as well as Centering, Bold Print and Underlining.



1 Press the **TEXT** key.

TEXT IN/EDIT/LIST?

- You will notice that when entering, modifying or printing a document, the display on your typewriter will ask:

2 Press the **"I"** key for In, **"E"** key for Edit or **"L"** key for List.

Press the **"I"** key when you are;

- creating the initial text
- appending(adding) to the end of a text

Press the **"E"** key when you are;

- recalling a text for modification
- recalling a text to print it
- listing the text names in memory on the display
- deleting a text from memory
- renaming a text

Press the **"L"** key when you are;

- requesting a printed list of text names in memory



A To Store Information in the Text Memory



1 Press the **TEXT** key.

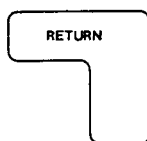
TEXT IN/EDIT/LIST?



2 Since you are entering information into the text memory:
Press the **"I"** key.

TEXT NAME= █

3 Name the text as you wish, but do not exceed ten (10) characters.



4 Press the **RETURN** key.
The text name will be appeared on the bottom of the display.

5 Enter the information to be stored.
• The way the text is printed depends on the typing mode:
In the "TPW" mode;
As you type the characters are printed on the paper with an automatic return.
In the "L/L" or "JST" mode;
As you type, the characters are shown on the display and each line will be printed after the **RETURN**, **PRINT** or **TAB** key is pressed or an automatic return is performed.



6 When finished, press the **TEXT** key again to store the information and close the text.
• The carriage will move to the left margin when the text is closed.

**When entering text names, all characters will appear in capital letters no matter how you type them.*

The minimum storage capacity of 47 bytes is necessary to store a text (file).

Always press the **TEXT** key before leaving the text memory mode.

Switching the power off will not automatically close a file, and loss of the contents of that file will occur.

B To Add to an Existing Text (File)

If you are interrupted while entering a text, simply end the document and continue it later.



1 Press the **TEXT** key.

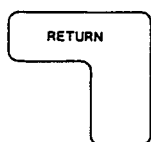
TEXT IN/EDIT/LIST?



2 Press the **"I"** key.

TEXT NAME=

3 Enter the text name to be recalled.



4 Press the **RETURN** key.
The display will show the following message.

CONTINUE TEXT Y/N?



5 Press the **"Y"** key.
• Press the **"N"** key to go back to step 2.

6 This positions you at the end of the text. Continue typing as you did while storing.

You cannot scroll backwards through the text at this time, using the **BACKSPACE** key, etc.
You may only continue where you left off.



7 Press the **TEXT** key again to store the added information and close the text file.

C To Print a Text from Memory

You have entered your document into memory and now want to print it.



1 Press the **TEXT** key.

TEXT IN/EDIT/LIST?



2 Press the “**E**” key.

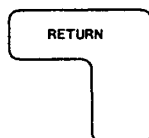
TEXT NAME=



3 Enter the name of the text to be printed.

- If you don't remember the text name, press the **FWD** key, the first text stored in memory will be recalled and the display will show its name.

Press the **FWD** key to display the next text, or the **BACKSPACE** key to display the previous one.



4 Press the **RETURN** key.

MARGIN CURRENT/STORED?



If the margin format you want to use is;

- The current format, press the “**C**” key.

The text will be opened and the unit will start printing from the point where the carriage is located.

- The format used when the text was stored last, press the “**S**” key.

The text will be opened, the carriage will move to the left margin and the unit will start printing.

The cursor will be at the beginning of the text.

- In case the text name is not stored in memory, the display will show the following message.

NOT FOUND !!

- Go back to the step 1.



5 Press the **PRINT** key.

- 6 Your typewriter will begin printing the document and the display will show the following:

TEXT PRINTING

- 7 When printing has finished, the display will show the last part of the text.

- If you want to print more than one original, press the **PRINT** key again.

The typewriter will start printing from the current carriage position.



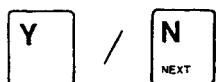
- 8 Press the **TEXT** key to close the text.

D To Stop Printing in the Middle of a Text



- 1 Press the **PRINT** key during printing.

CONTINUE Y/N?



- 2 If you want to exit the printing mode:

Press the "N" key.

If you want to continue printing the text:

Press the "Y" key.

Your typewriter will resume printing from the point on the line where it stopped.

- If you want to reprint from the beginning of the text:

Press the **CODE+RELOC** keys to return to the beginning of the text.

Press the **PRINT** key.

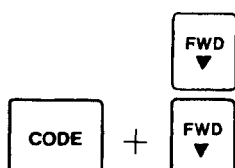
Your typewriter will start printing from the beginning of the text.

E To Print from a Particular Point

- 1 Perform the steps 1-4 of "To Print a Text from Memory" on p. 47 to recall the text.

- 2 Press the **FWD** key or the **CODE+FWD** keys to locate the desired starting point.

Refer to "To Scroll through Phrase Memory" on p. 41.



- 3 Press the **BACKSPACE** key until the first character to be printed disappears behind the cursor.



- 4 Press the **PRINT** key to start printing.



*The Word Search function (see p. 42) will help you to locate the desired word(s) easily.

F To Modify a Text (File)



1 Press the **TEXT** key.

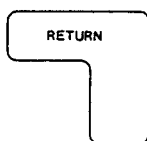
TEXT IN/EDIT/LIST?



2 Press the **"E"** key.

TEXT NAME= █

3 Enter the name of the text to be modified.



4 Press the **RETURN** key.

MARGIN CURRENT/STORED?



- If you wish to use the current margin settings (format), press the **"C"** key.

The text will be opened and the unit will start printing from the present carriage position.

- To use the same format as when the text was stored (if different from the current format), press the **"S"** key.


The text will be opened, the carriage will move to the left margin and the unit will start printing.

The cursor will position at the beginning of the text.



5 Press the **FWD** or **BACKSPACE** key to position the last character of the word or phrase to be deleted to the left of the cursor.



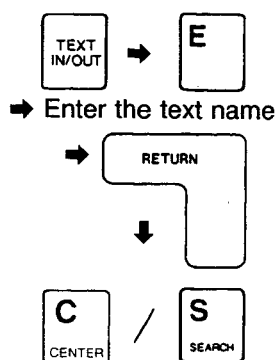
6 Press the **TEXT CLR** () or **QUICK ERASE** key to delete the characters and type the new characters.



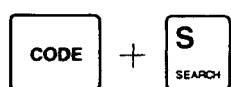
7 Press the **TEXT** key again to store the modified information and close the text.

G Word Search

As you have done in the Phrase Memory, you can locate the word to be corrected directly within a text.



- 1 Perform the steps 1-4 of "To Modify a Text (File)" on p. 49 to recall the text from memory.

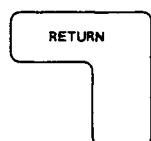


- 2 Press the **CODE+S** keys.

SEARCH-WORD=

- 3 Enter the word or words (maximum of 20 characters) you are searching for.

- Searching for particular characters.
- To search for a return mark, press the **CODE+RETURN** keys.
- To search for a start mark of the **BOLD** or **UNDERLINE** function, press the **CODE+B** keys for **BOLD** or **CODE+U** or **CODE+W** keys for **UNDERLINE**.
- To search for an end mark of the **BOLD** or **UNDERLINE** function, press the **CODE+B** keys twice for **BOLD** or **CODE+U** or **CODE+W** keys twice for **UNDERLINE**.




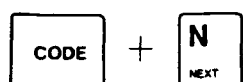
- 4 Press the **RETURN** key.
The cursor will position at the end of the word to be searched.

- When the entered word is not included in the text, the display will show:

NOT FOUND!!



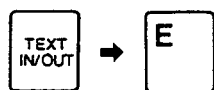
- 5 Press the **BACKSPACE** or **FWD** key to move to the desired position, and press the **TEXT CLR** () key to modify.



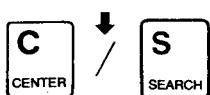
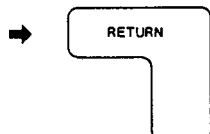
- 6 To locate the second occurrence of the entered word within the text, press the **CODE+N** keys.

H Word Replace

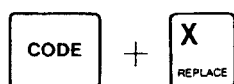
There may be times when certain words (such as titles or name) appear very often in a document, and need to be changed. The typewriter can replace the words individually or globally where ever they appear in the text.



→ Enter the text name

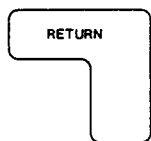


1 Perform the steps 1-4 of "To Modify a Text (File)" on p. 49 to recall the text.



2 Press the **CODE+X** keys.

CURRENT-WORD= █



3 Enter the word to be replaced (maximum 20 characters).
Press the **RETURN** key.

REPLACE-WORD= █

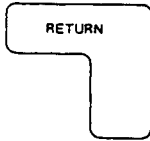
If the word entered is not in the text, the display will show the following and cancel the Word Replace command.

NOT FOUND!!

Only the word or words, with the following symbols in front of and behind, can be searched for.

- SPACE, CODE+H, CODE+SPACE BAR, CODE+J
- UNDER BAR
- TAB
- DECIMAL TABULATION
- BOLD, UNDERLINE MARK
- PARAGRAPH INDENT
- CENTERING
- RIGHT MARGIN FLUSH
- CODE+RETURN
- STOP CODE
- BLOCK MARK (█)

- 4 Enter the word or words (maximum of 20 characters) to be inserted.



- 5 Press the **RETURN** key.
The display will show:

INDIVIDUAL/GLOBAL?



- 6 Press the "**I**" key to replace the word or words individually.
The display will show:

REPLACE/NEXT/CANCEL?



- 7 Press the "**R**" key to replace the word or words and then locate the next occurrence of the word to be replaced.



- Press the "**N**" key to skip this occurrence and then locate the next occurrence of the word to be replaced.



- Press the "**C**" key to cancel this command.



- If you entered the "**G**" key to replace the word or words globally after the step 5, the display will show:

CHANGING

The display will show the last position in the text where your change has been made.

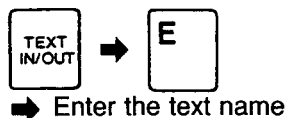
The changes have been made throughout the text.

To search for **BOLD** or **UNDERLINED** Text.

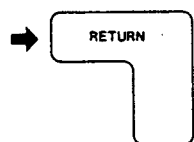
- To enter the start code for the **BOLD** or **UNDERLINE** function, press the **CODE+B**, the **CODE+U** or **CODE+W** keys respectively.
- To enter the end code for the **BOLD** or **UNDERLINE** function, press the **CODE+B** keys twice, the **CODE+U** or **CODE+W** keys twice respectively.

I To Insert a Phrase into Text Memory

Your typewriter allows you to recall phrase stored in the Phrase Memory and insert them into the Text memory.



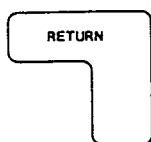
- 1 Recall your text.
[Refer to the steps 1-4 of "To Modify a Text (File)" on p. 49.]



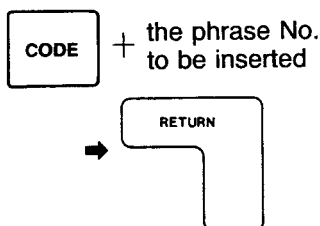
- 2 Press the **CODE**+**S** keys.

SEARCH-WORD= █

- 3 Enter the word proceeding the point at which the phrase is to be inserted.

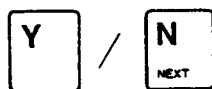


- 4 Press the **RETURN** key.
The cursor will position at the end of the word to be entered.



- 5 Press the **CODE**+1-20 keys (the phrase No. to be inserted) and then **RETURN** key.
The display will show:

COPY THIS PHRASE Y/N?

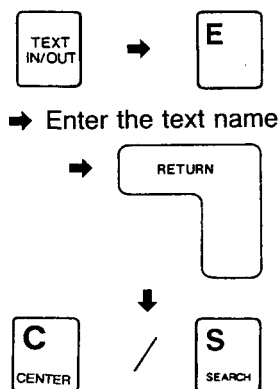


- 6 Press the "Y" key if you want it copied into the text.
•If you do not want it copied into the text, press the "N" key.

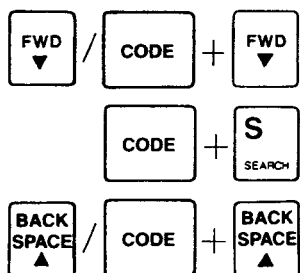
J Block Move, Copy and Delete

When the need to move, copy or delete a sentence or a paragraph arises, the typewriter can do it simply and automatically.

Mark a Block



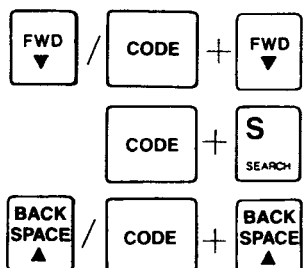
- 1 Recall your text.
[Refer to the steps 1-4 of "To Modify a Text (File)" on p. 49.]
The display will show you are at the beginning of the text.



- 2 Press the **FWD** key, the **CODE+FWD** keys, the **CODE+S** keys, the **BACKSPACE** key or the **CODE+BACKSPACE** keys to move the first character of the block to be moved, copied or deleted until the cursor will position at the end of the character.



- 3 Press the **CODE+Q** keys.
The display will show a rectangular () symbol just left of the cursor, which indicates the "beginning of a move, copy or delete command".



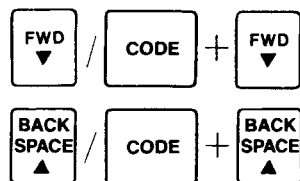
- 4 Press the **FWD** key, the **CODE+FWD** keys, the **CODE+S** keys, the **BACKSPACE** key or the **CODE+BACKSPACE** keys to position the last character of the block to be moved, copied or deleted to the left of the cursor.



- 5 Press the **CODE+Q** keys again.
A second rectangle will appear on the display indicating "end of move, copy or delete command".

To Move the Information Block

1 Perform the steps 1-5 of "Mark a Block" on p. 54 to locate the information block to be moved.



2 Move the position where you want to insert the information block which you have just marked, using the **FWD** key, **BACKSPACE** key or **CODE+BACKSPACE** or **CODE+FWD** keys.



3 Press the **CODE+Q** keys.

MOVE/COPY/DELETE?

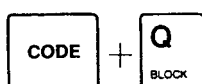


4 Press the "M" key to delete the words inside the rectangular () symbols and move them to the new position.

To Copy the Information Block

1 Perform the steps 1-5 of "Mark a Block" on p. 54 to locate the information block to be copied.

2 Move the position where you want to copy the information block. Refer to the step 2 of "To Move the Information Block" on this page.



3 Press the **CODE+Q** keys.

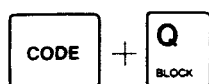
MOVE/COPY/DELETE?



4 Press the "C" key to copy the information block at the new position.

To Delete the Information Block

1 Perform the steps 1-5 of "Mark a Block" on p. 54 to locate the information block to be deleted.



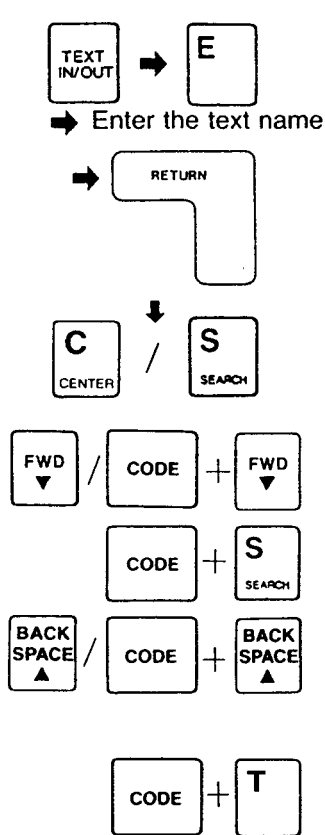
2 Press the **CODE+Q** keys.

MOVE/COPY/DELETE?



3 Press the "D" key to delete the information block.

K To Copy a Text to Another Text Name



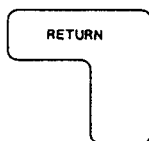
- 1 Recall your text.
[Refer to the steps 1-4 of "To Modify a Text (File)" on p. 49.]
The display will show you are at the beginning of the text.

- 2 Press the **FWD** key, the **CODE+FWD** keys, the **CODE+S** keys, the **BACKSPACE** key or the **CODE+BACKSPACE** keys to move the position where you want to insert another text.

- 3 Press the **CODE+T** keys.
The display will show:

TEXT TO COPY=■

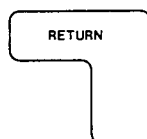
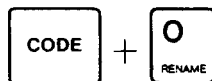
- 4 Enter the text name to be copied.



- 5 Press the **RETURN** key.
The display will show the last position of the copied text.

• If you have marked a block in a text to be copied (refer to the steps 2-5 of "Mark a Block" on p. 54.), your typewriter will only copy the block to another text.

L To Rename a Text



- 1 Recall your text.
[Refer to the steps 1-4 of "To Modify a Text (File)" on p. 49.]
The display will indicate the beginning of the text.

- 2 Press the **CODE+O** keys.

NEW NAME= █

- 3 Enter the new name.

- 4 Press the **RETURN** key.
If the name you just entered is already being used, the display will show:

ALREADY EXISTS

- 5 Press the **TEXT** key to close the text.

Your text is now renamed. In the future, the new text name should be used because the original is no longer in memory.

M To List Texts on the Display

There may be times when you need to know the names of the texts which are stored in memory. To display each text name successively.



- 1 Press the **TEXT** key.

TEXT IN/EDIT/LIST?

- 2 Press the "**E**" key.

TEXT NAME= █

- 3 If you don't remember the text name, press the **FWD** key.
Your display will show the name of the first text which you have in memory.

- Continue pressing the **FWD** key to scroll forward through the remaining text names.
- Press the **BACKSPACE** key to scroll backward through the text names.
- When you have reached the last text in memory, your typewriter will sound to indicate "End of Memory".
- To select a text to edit or print, press the **RETURN** key when the correct text name is displayed.

- 4 Press the **TEXT** key to exit from the text listing mode.

N To Print the Text Listing



- 1 Press the **TEXT** key.

TEXT IN/EDIT/LIST?



- 2 Press the “**L**” key.
The names of the texts in memory will be printed on the paper.

PRINTING

- The amount of available memory will also be printed.

O Memory Left

Occasionally you will want to know how much memory is available before entering a new text.



+



To find out how much memory is available, press the **CODE+M** keys.

The display will show the following:

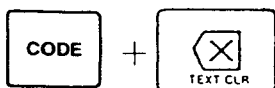
CHARACTERS LEFT


(#: character available)

P To Clear a Text from Memory

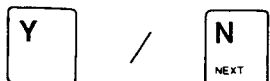
When you no longer need a particular text, or need the space to enter new text, you can delete an old text from memory as follows:

- 1 Recall your text from memory.
Refer to the steps 1-4 of “To Modify a Text (File)” on p. 49.



- 2 Press the **CODE+TEXT CLR** () keys.

CLEAR THIS TEXT Y/N?

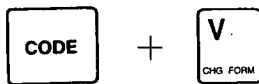


- 3 Press the “**Y**” key to delete the text from memory.
• If you want to exit from this mode without deleting the text, press the “**N**” key.

Q To Change the Margin Format in the Text

This typewriter allows you to change the margin format in the text memory to the current margin format.

- 1 Recall your text.
Refer to the steps 1-4 of "To Modify a Text (File)" on p. 49.
Press the "C" key to choose the current margin format.



- 2 Press the CODE+V keys.

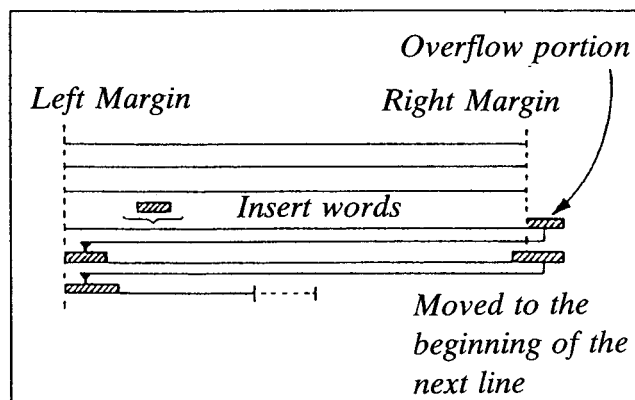
CHANGE FORMAT Y/N?



- 3 Press the "Y" key to store the current margin format in the text.
Press the "N" key, if you do not want to change the format.

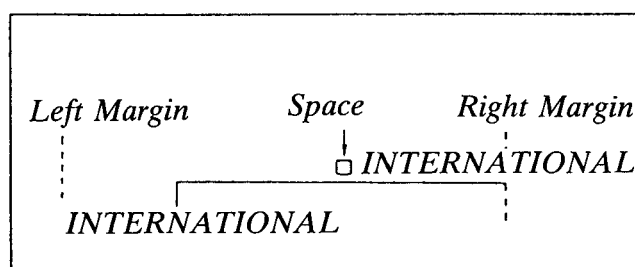
R Word-Wrap

Word-Wrap means that a word exceeding the right margin will be shifted automatically to the beginning of the next line.



This function starts from the space before the last word which would overflow the right margin. After the insertion of a new word, the last word will be moved to the beginning of the next line. Word-Wrap will occur within the sentences of each paragraph.

EXAMPLE:



Spaces which fall at the left margin after carriage return with Word-Wrap will be eliminated and printing of the recorded characters will start at the left margin.

3-4 APPLICATION

A Stop Code

You may want to type a letter and send it to several different people. Each letter can be personalized and have specific but different information inserted into the body of the text.

These different bits of information are referred to as “variables”.

Your typewriter will allow you to enter a text and instruct it to stop printing at a particular point so that you may insert the variable within the body of the letter.

This code “to stop printing and insert variables” is called a Stop Code.

To Store a Text with Stop Codes

1 Perform the steps 1-4 of “To Store Information in the Text Memory” on p. 45.

2 Begin typing the document.



3 When you are at the position within the text where you want to insert variable information.
Press the **CODE+P** keys.

STOP CODE WAS SET

4 Continue typing.
The symbol “**S**” appears on the display at the position where the stop codes will be inserted.

• Continue entering the stop codes following the above procedure for all locations where the variables will be inserted.



5 When you have completed entering the text, press the **TEXT** key again to store the stop codes and close your text.

To Print a Text with Stop Codes

1 Perform the steps 1-4 of "To Modify a Text (File)" on p. 49 to recall the text.

The display will indicate that you are at the beginning of the text.



2 Press the **PRINT** key to print to the point where the first stop code was set. The display will show:

STOP CODE

- This message will displayed, then the symbol "S" appear on the display at the position where the stop code was set.

3 Enter your variable which will be inserted in the first position by typing it or recalling it from the Phrase Memory. (CODE+1-20 and then **RETURN** key).



4 Press the **PRINT** key to resume printing.

- Continue inserting the variables until you have completed the text.

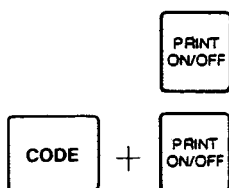
B To Store Information without Printing

This typewriter allows you to store phrase and texts with the No Print feature. By using this feature you can store information without printing them on the paper.

When storing in the Phrase Memory:

- Perform step 1 of "To Store Information in the Phrase Memory" on p. 39.

- Press the **PRINT** key or the **CODE+PRINT** keys. The display will show:



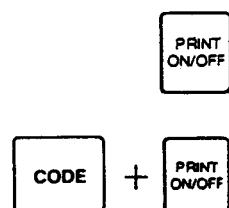
NO PRINT

- Perform the steps 2-3 of "To Store Information in the Phrase Memory" on p. 39.

When storing in the text memory:

- Perform the steps 1-4 of "To Store Information in the Text Memory" on p. 45.

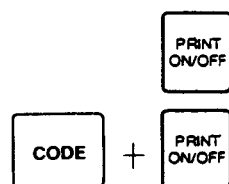
- Press the **PRINT** key or the **CODE+PRINT** keys. The display will show:



NO PRINT

- Perform the steps 5-6 of "To Store Information in the Text Memory" on p. 45.

When you use the **PRINT** key, the carriage will move corresponding to the Typing Mode. When you use the **CODE+PRINT** keys, the carriage will not move.



3-5 ADDRESS LIST MEMORY

This typewriter will allow you to store up to 100 separate records. A record consists of three terms; a name, an address and a phone number.

Remember, the length of each record is limited by the total available memory of your typewriter.

Address List Memory will accept;

Bold

Underline

Address List Memory will not accept;

Centering

Right Margin Flush

Tab

Decimal Tabulation

Paragraph Indent

Stop Code



1

Press the **ADDRESS LIST** key.

You will notice that when entering, modifying or printing a record, the display on your typewriter will show:

ADDRESS LIST IN/EDIT/LIST?

2

Press the "I" key for In, "E" key for Edit or "L" key for List.



Press the "I" key when you are:

- creating the initial record



Press the "E" key when you are:

- recalling a record for modification
- recalling a record to print it
- deleting a record from memory



Press the "L" key when you are:

- printing all stored records



- 1** Press the **ADDRESS LIST** key.
The display will show:

ADDRESS LIST IN/EDIT/LIST?




- 2** To create an Address List, press the **"I"** key.
The display will show:

ADDRESS LIST [NAME]

• The display will show a current record number on the bottom of the display.

- 3** Type the information to be stored, but do not exceed 200 characters.

• If you want to sort the records according to each last name, press the **CODE+Q** keys between the first name and the last name of each "NAME" term. The display will show a rectangular () symbol.



- 4** Press the **INDEX** key to move the next term.
The display will show:

ADDRESS LIST [ADDR.]

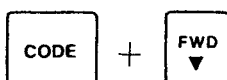
- 5** Type the information to be stored, but do not exceed 200 characters.



- 6** Press the **INDEX** key to move the next term.
The display will show:

ADDRESS LIST [PHONE]

- 7** Type the information to be stored, but do not exceed 200 characters.



- 8** To store additional records, press the **CODE+FWD** keys to move the next record and repeat the above steps 3-7.
• You can store a maximum of 100 records. If you attempt to enter more than 100 records, the display will show:

TOO MANY RECORDS!



- 9 Press the **ADDRESS LIST** key to end the function.
The display will show:

ADDRESS LIST END

- If you attempt to enter more than 200 characters in "NAME", "ADDR." and "PHONE" terms, the display will show:

TERM TOO LONG

- The records you have stored will be filed in alphabetical order by the first character of the "NAME" term.

- When you enter a "NAME" term using the **CODE+Q** keys (outlined in step 3) each record will be sorted in ascending character set order (see page 83) according to the first character after the sort rectangle (□). This means that spaces and numeric characters will appear prior to alphabet characters.

To practice the exercises in this manual, please enter the following names and addresses. Store the records alphabetically by last name using the **CODE+Q** keys sequence where indicated.

<p style="text-align: center;">↙ CODE+Q</p> <p>NAME: Mrs. Monica Simpson</p> <p>ADDRESS: 29 Hicks Street, New York, ↵ N.Y. 10004</p> <p>PHONE: 123-456-7890</p>	<p style="text-align: center;">↙ CODE+Q</p> <p>NAME: Mr. Paul Smith</p> <p>ADDRESS: 1985 Harrison Road, Ridgfield Park, ↵ N.J. 07660</p> <p>PHONE: 483-591-6720</p>
<p style="text-align: center;">↙ CODE+Q</p> <p>NAME: Mrs. Alicia Pritchett</p> <p>ADDRESS: 131 Ascan Avenue, Summit, ↵ N.J. 07091</p> <p>PHONE: 852-963-7410</p>	<p style="text-align: center;">↙ CODE+Q</p> <p>NAME: Mr. David Keath ↵ General Manager</p> <p>ADDRESS: 234 Ocean Blvd. East Harwich, ↵ M.A. 02645</p> <p>PHONE: 158-942-6370</p> <p>(↵ : Press the RETURN key.)</p>

B To Add to an Existing Address List



- 1** Press the **ADDRESS LIST** key.
The display will show:

ADDRESS LIST IN/EDIT/LIST?



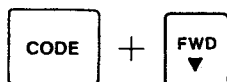
- 2** Press the **"I"** key.
The display will show:

ADDRESS LIST [NAME]

- 3** Perform steps 3-9 of "To Store Information in the Address List Memory" on p. 63 to store the additional information.

C To Scroll through Address List Memory

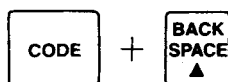
There are two ways of locating records within the Address List to make additions, deletions or corrections. They are called "scrolling". (At edit mode.)



- (A) Pressing the **CODE+FWD** keys allows you to scroll forward to the next record.

- After the last record in memory has been displayed, the following message will appear on the display for about one second;

BOTTOM OF LIST



- (B) Pressing the **CODE+BACKSPACE** keys allows you to scroll backward to the previous record.

- After the first record in memory has been displayed, the following message will appear on the display for about one second;

TOP OF LIST

D To Modify a Record

If you want to modify a record, do the following:



- 1 Press the **ADDRESS LIST** key.
The display will show:

ADDRESS LIST IN/EDIT/LIST?



- 2 Press the **"E"** key.
The name of the first record in alphabetical order will be shown on the display.

ADDRESS LIST [NAME]

Mr. David [Keath]

- If there are no records stored in memory, the display will show the following message:

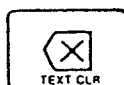
NO RECORDS



- 3 Press the **BACKSPACE** or **FWD** key to position the character to be deleted to the left of the cursor.

ADDRESS LIST [NAME]

Mr. David [Keath]



- 4 Press the **TEXT CLR** () key to delete the characters.

ADDRESS LIST [NAME]

Mr. David [Ket]

- 5 Type the new character.

ADDRESS LIST [NAME]

Mr. David [Keith]



6

*After your corrections have been made:
Press the **ADDRESS LIST** key.*

- *If the characters to be modified are located toward the end of the current term, press the **RELOC** key to position yourself at the end of the term.*
- *If the characters to be modified are located toward the beginning of the current term, press the **CODE+RELOC** keys to position yourself at the beginning of the term.*
- *If the characters to be modified are located in another term, press the **INDEX** key to move to another term.*
- *If the characters to be modified are located in the next record, press the **CODE+FWD** keys to move to the next record.*
- *If the characters to be modified are located in the previous record, press the **CODE+BACKSPACE** keys to move to the previous record.*

• *If the "NAME" term is blank, you can not move to another terms.*

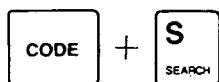
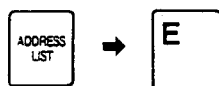
The display will show:

ENTER DATA

You must enter the required information for the "NAME" term.

E Name Search

You can search directly to the "NAME" term of the record to be modified or printed.



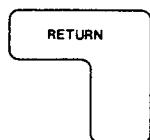
1 Perform the steps 1-2 of "To Modify a Record" on p. 66 to open the Address List.

2 Press the **CODE+S** keys.
The display will show:

SEARCH-NAME= █

3 Enter the character(s) (a maximum of 20 characters) you are searching for. (For example, Simpson)

SEARCH-NAME=Simpson █



4 Press the **RETURN** key.
Your typewriter will start search each "NAME" term for the character(s).
The display will show "NAME" term of the found records.

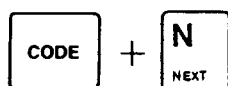
ADDRESS LIST [NAME]

█ Mrs. Monica █ Simpson

• If the characters are not in the list, the display will show:

NOT FOUND!!

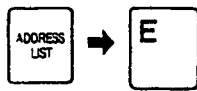
5 Modify or print the record if necessary.



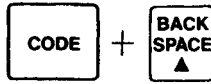
6 To locate the next occurrence of the entered character(s) within the Address List, press the **CODE+N** keys.

F To Print from the Address List Memory

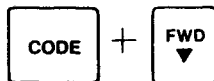
You have entered your record into memory and now want to print it.



- 1** Perform the steps 1-2 of "To Modify a Record" on p. 66 to open the Address List. The first name in the list will appear on the display.



- 2** Press the **CODE+BACKSPACE**, **CODE+FWD** or **CODE+S** keys to locate the record you want to print.



- 3** Press the **PRINT** key.
The display will show:

PRINT PHONE NO. Y/N?



- Press the **SPACE BAR** or the **BACKSPACE** key to move the carriage to the desired printing position.
 - Should you want to change the vertical position of the paper, use the Platen Knob.
 - Press the "Y" key to print the phone number as well as the name and address.
 - Press the "N" key to print only the name and address.
- The display will show:

PRINTING

- The typewriter will start printing your record from the current carriage position.
- After printing, the display will show the "NAME" term of the current record.

**Do not change the pitch while the typewriter is printing.*

G To Stop Printing in the Middle of the Record



- 1 Press the **PRINT** key during printing.
The display will show:

CONTINUE Y/N?



- 2 If you want to exit the printing mode:
Press the "N" key.

If you want to continue printing record:
Press the "Y" key.

Your typewriter will resume printing from the point on the line where it stopped.

- The display will then show the "NAME" term of the current record.

H To Print All of the Records



- 1 Press the **ADDRESS LIST** key.
The display will show:

ADDRESS LIST IN/EDIT/LIST?



- 2 Press the "L" key.
The display will show:

PRINTING

The typewriter will automatically print all of the records according to the following format independent of the current margin format.

PITCH	NAME	SPACE	ADDRESS & PHONE
10	25 chr.	5	35 chr.
12	30 chr.	6	42 chr.
15	37 chr.	8	52 chr.

If the Address List contains more than 50 lines, the typewriter stops after printing a record including 50th line and then the following message will display:

CONTINUE Y/N?



To continue printing;

Insert a new sheet of paper and press the "Y" key.

To Stop printing;

Press the "N" key.

The display will show the following message and then the typewriter will exit from the Address List Mode.

ADDRESS LIST END

When printing has finished, the following message will display, and then the typewriter will exit from the Address List Mode.

ADDRESS LIST END

I To Print a Record on an Envelope



- 1** Press the **ADDRESS LIST** key.
The display will show:

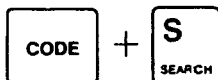
ADDRESS LIST IN/EDIT/LIST?



- 2** Press the **"E"** key.
The name of the first record will be shown on the display.

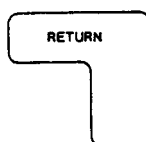
ADDRESS LIST [NAME]

Mr. David [Keith]



- 3** Press the **CODE+S** keys to search for return address name.
(For example, Simpson)

SEARCH-NAME=Simpson



- 4** Press the **RETURN** key.

ADDRESS LIST [NAME]

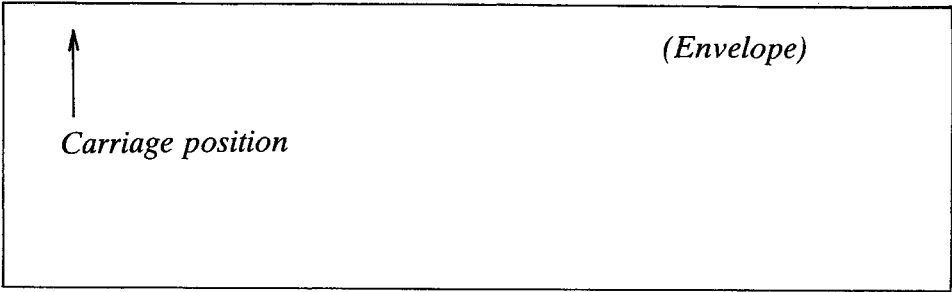
Mrs. Monica [Simpson]



5 Press the **PRINT** key.

PRINT PHONE NO. Y/N?

- Press the **SPACE BAR** or the **BACKSPACE** key to move the carriage to the desired printing position.
- Change the vertical position of the paper using the *Platen Knob*.



6 Press the **"Y"** key.

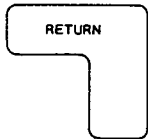
PRINTING

- After printing, the display will show the **"NAME"** term of the current record.



7 Press the **CODE+S** keys to search for the mailing address name. (For example, David)

SEARCH-NAME=David



8 Press the **RETURN** key.

ADDRESS LIST [NAME]
Mr. David Keith



- 9** Press the **PRINT** key.
The display will show:

PRINT PHONE NO. Y/N?

- Press the **SPACE BAR** or the **BACKSPACE** key to move the carriage to the desired printing position.
- Change the vertical position of the paper using the Platen Knob.

Mrs. Monica Simpson
29 Hicks Street, New York,
N.Y. 10004
123-456-7890

↑
Carriage position



- 10** Press the **"N"** key.
The display will show:

PRINTING

Mrs. Monica Simpson
29 Hicks Street, New York,
N.Y. 10004
123-456-7890

Mr. David Keith
General Manager
234 Ocean Blvd. East Harwich,
M.A. 02645


- After printing, the display will show the **"NAME"** term of the current record.



- 11** Press the **ADDRESS LIST** key.

J To Delete a Record from Memory

When you no longer need a particular record, or need the space to enter a new record. You can delete an old record from memory as follows:

- 1 Perform the steps 1-2 of "To Modify a Record" on p. 66 to recall your record.
- 2 Press the **CODE+BACKSPACE**, **CODE+FWD** or **CODE+S** keys to locate the record to be deleted.
- 3 Press the **CODE+TEXT CLR** () keys.
The display will show:

DELETE THIS RECORD Y/N?

Y / N
NEXT

- 4 Press the "Y" key to delete the record from memory.
 - If you want to exit from this mode without deleting the record, press the "N" key.

- After deleting a record, the display will show the "NAME" term of the next record.
- If you delete the last record, the display will show the "NAME" term of the previous record.
- After deleting all of the records, the display will show:

NO RECORDS

after one second,

ADDRESS LIST IN/EDIT/LIST?

4-1 ACCU-SPELL PLUS™

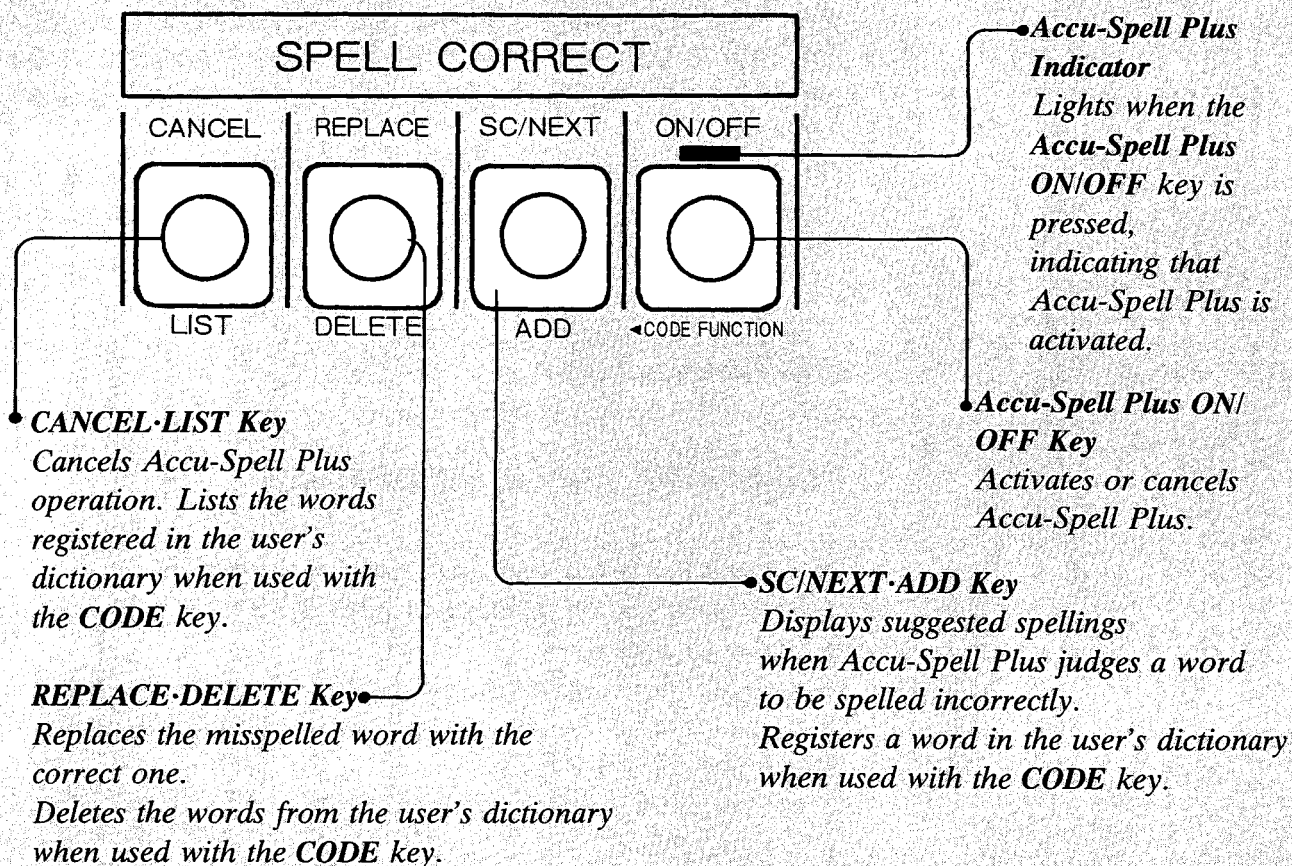
(Spell Verifying/Correcting Feature)

When you misspell a word, Accu-Spell Plus informs you by means of an indication on the display and a buzzer. By using Accu-Spell Plus function, you can easily replace misspelled words with the correct spelling. The typed words are checked against the standard dictionary, which contains about 63,000 words, and a user's dictionary of up to 120 words.

The user's dictionary can be deleted and changed, and a list of user's dictionary words can be printed or displayed.

• Accu-Spell Plus™ is a trademark of the Spell Correct Function in the U.S.A.

• The following keys are used as Accu-Spell Plus Function keys.



..... Use this operation to check the spelling of an entire text file.

Accu-Spell Plus operates when you make an input from your keyboard.
It does not work when a text is printing and Address List function is activated.

International CorrectSpell™ English licensed from Houghton Mifflin Company. U.S. Pat. No. 4,580,241, 4,730,269, 4,674,066 and 4,771,401. Copyright © 1985, 1987, 1988 by Houghton Mifflin. All rights reserved. Reproduction or disassembly of embodied algorithms or database prohibited. Based upon The American Heritage Dictionary.

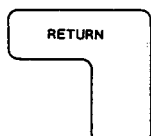
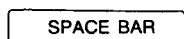
International CorrectSpell is an HMCo trademark.

A Accu-Spell Plus Operation



- 1 Press the **Accu-Spell Plus ON/OFF** key.
The **Accu-Spell Plus Indicator** will light.

- 2 While **Accu-Spell Plus** is activated, enter the words as usual.



- 3 When you end a word (by pressing the **SPACE BAR** or **RETURN** key, etc.), it will be checked.
 - If the word is not contained in either the standard dictionary or the user's dictionary, the typewriter will judge it to be a misspelled word, the buzzer will sound, and the word will flash on the display.
 - If the word is found in either the standard dictionary or user's dictionary, the buzzer will not sound and the display will remain unchanged.
 - If the **RETURN** key is pressed immediately after typing a misspelled word, the buzzer will sound but the word will not flash on the display. (Except text edit mode.)



- 4 Press the **SC/NEXT** key.
The display will show:

SEARCHING FOR ALTERNATIVES

- A correctly spelled word will show on the display.
If it is not the desired word, press the **SC/NEXT** key again to display the next suggestions.
Repeat the above operation until the desired word will be displayed.
You can also call the previous or next suggestions by pressing the **BACKSPACE** or **FWD** key.
If the correct word to be replaced cannot be found more, the display will show:

NO MORE ALTERNATIVES

In this case, press the **CANCEL** key and use the ordinary correction method.



- 5 When the desired word will be displayed, press the **REPLACE** key.
The misspelled word will be replaced with correct one.
 - You can not replace a word which is hyphenated with an automatic return. In this case, the display will show:

CAN NOT REPLACE

- You can correct the misspelled word while it is flashing.
- If the length of the correct word is different from the misspelled word in the "TPW" mode, the misspelled word and the following characters are deleted and reprinted.
- If the word to be inserted is longer than the misspelled word, causing the line to go past the right limit margin, the display will show:

WORD TOO LONG

- If no suggestion is found when the SC/NEXT key is pressed, the display will show:

NO ALTERNATIVES

Word Endings

Accu-Spell Plus checks a word only when it has been completed.

The typewriter judges that a word has been completed when you perform one of the following operations:

- when you press the **SPACE BAR** after a word
- when you press the **RETURN** key
- when you press a function key to move the carriage (**TAB**, **SPACE BAR**, etc.)
- when you perform Right Margin Flush or Centering

When you enter a character after entering a hyphen at the end of a line, the automatic return is performed and the word will be connected to the beginning of the next line, and will be spell verified as a single word.

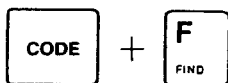
Accu-Spell Plus checks spelling according to the following rules.

- Numbers and symbols are also treated as part of a word. For example, "etc" is treated as a mistake while "etc." is judged correct.
- Symbols before and after a word such as " " (quotation marks) and ? (question mark) are first removed from the word before it is spell verified. For example, "Great!" is judged correct, but "Gleat!!" is judged incorrect.
- Some punctuation errors are detected. For example, "word:)" is judged as an error and the buzzer will sound.
- Some errors of apostrophe are detected. For example, "now's" and "at's" will be judged incorrect.
- A word consisting of several words joined by hyphen, such as "mother-in-law", is spell verified as a single compound word.
- Accu-Spell Plus takes into account the difference between capital letters and small letters. If you type "check, Check, CHECK", all of these words will be judged correct. This is because when a word is at the beginning of a sentence, it starts with a capital letter, while if it is part of a title it consists entirely of capital letters. If, however, you type "CHeck", it will be judged incorrect.
- In the case of words which always begin with a capital letter, such as America, both "America" and "AMERICA" will be judged correct, however "america" will be judged incorrect.

B How to Verify/Correct the Spelling of an Entire File

1 While Accu-Spell Plus is activated, press the **TEXT** key, enter the text name or the phrase number (1-20) to be verified.

2 Move the beginning of the phrase or text operation.

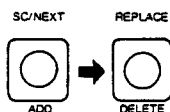


3 Press the **CODE+F** keys.

4 Each word in the text will be verified from the cursor position sequentially to the end of the text.
The display will show:

VERIFYING

5 If a word that is not in the dictionary is found, spell verification will be interrupted, the buzzer will sound, and the word will appear as a flashing indication on the display.



6 Correct the misspelled word by pressing the **SC/NEXT** key and **REPLACE** key.



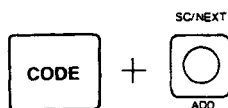
7 To continue spell verification, press the **CODE+F** keys.

8 If no misspelled words are found in any part of the text or the phrases, the following message will appear on the display, and cursor position remains unchanged.

VERIFIED

C How to Add Words to the User's Dictionary

1 Enter the word to be added.



2 Press the **CODE+SC/NEXT** keys.

3 The word will be registered in the user's dictionary.
The display will show:

ADDED : (the added word)

- You can register a word by pressing the **CODE+SC/NEXT** keys immediately after the check.
- You can also register a word by first moving the carriage to the desired word and then press the **CODE+SC/NEXT** keys.
- You can also register words which include number and symbols, but at least two alphabet characters should be included for registration.

Otherwise the display will show:

NOT ACCEPTED

- If there is no room in the user's dictionary memory to register the word, the buzzer will sound.
- The display will show:

DICTIONARY FULL!

In this case, you must first delete a word or words already registered in order to register the new word.

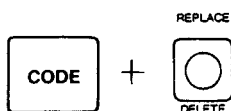
- If the word which you want to register is already registered in the standard dictionary or user's dictionary, the display will show:

ALREADY EXISTS

- You can add the word of maximum 30 characters.
- If you attempt to add a word of more than 31 characters, the display will show:

WORD TOO LONG

D How to Delete Words from the User's Dictionary



1 Enter the word to be deleted.

2 Press the **CODE+REPLACE** keys.

3 The word will be deleted from the user's dictionary.
The display will show:

DELETED : (the deleted word)

- You can delete a word by pressing the **CODE+REPLACE** keys immediately after the check.
- You can delete a word by first moving the carriage to perform a check, then immediately after the check, press the **CODE+REPLACE** keys.
- If the word which you want to delete from the standard dictionary or the user's dictionary can not be found, the display will show:

NOT FOUND!!

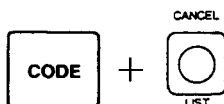
- If you try to delete a word from the standard dictionary, the display will show:

CAN NOT DELETE

- While displaying a list of the registered words, you can delete a displayed word by pressing the **CODE+REPLACE** keys.

E How to List Words in the User's Dictionary

How to Display the Contents of the User's Dictionary



- 1 Press the **CODE**+**CANCEL** keys.
The first word in the user's dictionary will appear on the display.



- 2 Each time you press the **FWD** key or the **BACKSPACE** key, the next or the previous word will be displayed in alphabetical order.
 - You can see the contents of the user's dictionary from any point only by entering the capital letter you want to display from.
 - By pressing the **CODE**+**REPLACE** keys, the word displayed will be deleted.

- 3 After the last word in the user's dictionary has been displayed, the display will show:

LIST MODE END

How to Print the Contents of the User's Dictionary

- 1 While in the List Mode, press the **PRINT** key.
Printing will start from the current word.



- 2 If you want to stop printing, press the **PRINT** key.
After the present line has been printed, printing will temporarily stop.



- 3 By pressing the **PRINT** key once again, printing will start.

- 4 After the last word in the user's dictionary has been printed, the display will show:

LIST MODE END

How to Exit the List Mode (Printing/Display)



- 1 While in the List Mode, press the **Accu-Spell Plus ON/OFF** key.

- 2 **Accu-Spell Plus** will be canceled and the **Accu-Spell Plus Indicator** will go out.



- 3 By pressing the **Accu-Spell Plus ON/OFF** key once again, **Accu-Spell Plus** will be reactivated.

5-1 USE AS A PRINTER (with KX-R60)

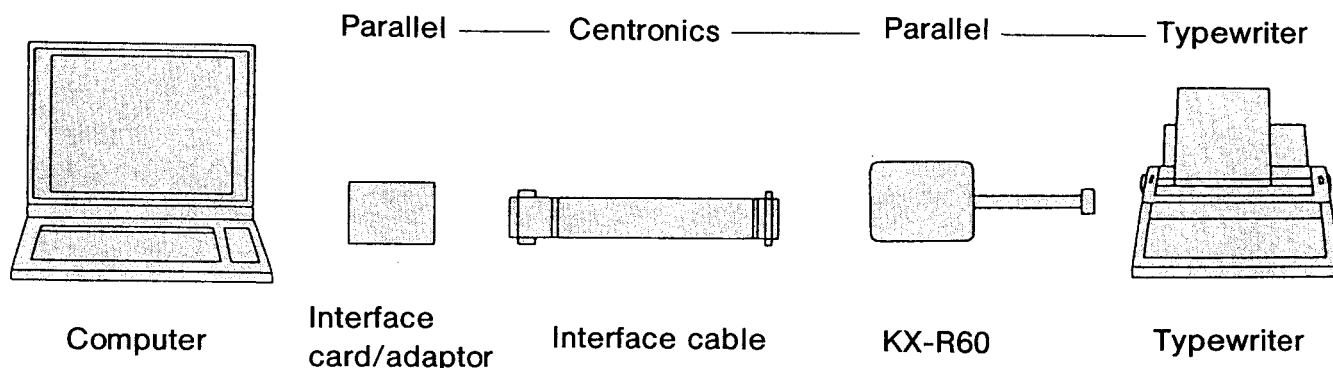
To use this unit as a printer, the following must be purchased separately.

- KX-R60 (Interface Adaptor), optional
- Interface cable
- Interface card (if necessary for your computer)

A Connection to a Computer

This unit has a connector that is designed to receive data from the Panasonic KX-R60 Interface Adaptor. In turn, the KX-R60 interfaces to the computer (or to its external interface adaptor).

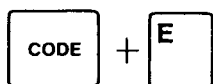
This typewriter can be used as a printer to print data from a computer that is equipped with a parallel (Centronics) interface. The KX-R800 emulates the boldface and underline commands used for EPSON printers.



- If your computer is not equipped with a Centronics parallel interface then you will need to purchase one for your computer.
- Proceed with the connections before pressing the **CODE+E** keys.

Before connecting the computer, refer to the operating instructions for the KX-R60 and your computer.

B Operation



- 1 Press the **CODE+E** keys.

EXTERNAL MODE: ON LINE



- 2 To stop printing temporarily, press the **PRINT** key of the typewriter.

EXTERNAL MODE: OFF LINE

- Press the **PRINT** key again to resume printing.
- While data is being received by the Interface Adaptor, the Carriage automatically returns when it reaches the right margin. The paper advances one line and printing continues.
- When the **PRINT** key is pressed, printing will stop after the current line has been printed.

C Reference

Character Set

Every Computer has a set of letters, numbers, and symbols that it can display. This is called its "character set".

Every printer also has a character set, that is, the numbers, letters, and symbols that it can print.

Unfortunately, these character sets do not match perfectly from computer to computer or printer to printer. Fortunately, enough of the characters do match so that you can print English sentences and, of course, numerals.

The characters that don't match are usually the foreign character accents and other special symbols.

Upper Lower	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			SP	0	@	P	`	p			ß	¨	Ú	ù		
1			!	1	A	Q	a	q			½	Ä	á	^		
2			"	2	B	R	b	r			¼	Ë	é	Â		
3			#	3	C	S	c	s				Ï	í	Ê		
4			\$	4	D	T	d	t				Ö	ó	Î		
5			%	5	E	U	e	u				Ü	ú	Ô		ñ
6			&	6	F	V	f	v				ä	˘	Û		
7			'	7	G	W	g	w				ë	À	â		
8	BS		(8	H	X	h	x			ç	ï	È	ê		
9	HT)	9	I	Y	i	y				ö	Ì	î		˘
A	LF		*	:	J	Z	j	z			ı	ü	Ò	ô		Ã
B		ESC	+	;	K	SP	k	SP			ı	˘	Ù	û		Õ
C			,	SP	L	SP	l	SP			¢	Á	à			Ñ
D	CR		-	=	M	SP	m	SP			£	É	è			ã
E			.	SP	N	^	n	˘				Í	ì			õ
F			/	?	O	_	o					Ó	ò			

(SP=Space)

•For the five types of accent symbols (Codes, B0H, BBH, C6H, D1H, F9H) the carriage respectively stops at the printing position and moves after printing the next character.

Control Codes

Symbol	Code	Operation
BS	08H	Back Space
HT	09H	Tabulation
LF	0AH	Line Feed
CR	0DH	Carriage Return
ESC	1BH	Special functions in combination with the following code

•Expansion Function

ESC+"E" (1BH+45H) Bold ON
 ESC+"F" (1BH+46H) Bold OFF
 ESC+"G" (1BH+47H) Bold ON
 ESC+"H" (1BH+48H) Bold OFF
 ESC+" - "+00H (1BH+2DH+00H) Underline OFF
 ESC+" - "+01H (1BH+2DH+01H) Underline ON
 ESC+" - "+0" (1BH+2DH+30H) Underline OFF
 ESC+" - "+1" (1BH+2DH+31H) Underline ON

Auto Line Feed Operation

Automatic Line Feed can be selected by setting the Carriage Return Mode as shown below.

•Automatic Carriage Return Mode

Auto Line Feed ON

•Manual Carriage Return Mode

Auto Line Feed OFF

Code	Auto Line Feed ON	Auto Line Feed OFF
CR	Carriage Return, Line Feed	Carriage Return
LF	Carriage Return, Line Feed	Line Feed
CR+LF	Carriage Return, Line Feed	Carriage Return, Line Feed
LF+CR	Carriage Return, Line Feed	Carriage Return, Line Feed

6-1 OTHERS

A Troubleshooting

• Check the points below before returning your typewriter for service.



Symptom	Cause	Remedy/check
No operations; even when keys are pressed, nothing appears on the display.	The POWER switch is turned "OFF" or Power Cord is unplugged.	Turn the POWER switch "ON". Plug in the Power Cord.
	The LCD Contrast Adjuster is set to low contrast.	Adjust the setting of the LCD Contrast Adjuster
Unit does not print correctly, or printing is blurred.	Paper Release Lever is in Release position.	Push lever to Lock position.
	End of Ribbon Cassette or Correction Tape.	Replace with new Ribbon Cassette or Correction Tape.
No deletion even with the TEXT CLR (☒) key; blurred characters.	Correction Tape is not installed, or installed incorrectly.	Install Correction Tape.
Buzzer sounds during typing and typing is disabled (keys do not function).	Carriage at right margin.	Press the RETURN key and move carriage to next line.
		Press the MAR REL key and continue printing on same line.
	Text Memory is full.	Re-edit the data or cancel the Text Memory Mode.
The unit does not operate properly. The error buzzer sounds when typing and/or keys do not function. Text, Phrase and (or) Address List Memory may contain garbled characters.	Noise on the AC line or static electricity may prevent the unit from operating properly.	Turn the POWER "OFF" for a few seconds then "ON" again. If the unit still does not function properly turn the POWER "OFF", press and hold the CODE+SHIFT keys and turn the POWER "ON". This performs a Total Reset which clears all memory and margin formats.



B Product Service

Should your Panasonic product ever require service, refer to the Directory on page 93 for an Authorized Servicenter or consult your authorized Panasonic dealer for additional information.





6-2 LIST OF CODE KEY FUNCTIONS




- p>CODE +
- A**
-
- AUTO sets/releases auto carrier return mode
- P. 29**
- p>CODE +
- B**
-
- BOLD sets/releases
- BOLD**
- print
- P. 27**
- p>CODE +
- C**
-
- CENTR centers information
- P. 29~31**
- p>CODE +
- E**
- sets the machine to be used as a printer to print data from a computer
- P. 82**
- p>CODE +
- F**
-
- FIND finds mistype (at edit mode)
- P. 78**
- p>CODE +
- G**
- disable status line information on the 4th line in Text edit mode.
- P. 43**
- p>CODE +
- H**
-
- HALF SP Half spacing
- P. 34**
- p>CODE +
- I**
-
- P INDENT sets/releases Paragraph Indent
- P. 32**
- p>CODE +
- J**
-
- MICRO SP moves the carriage by 1/60 inch (Micro-Pitch Spacing)
- P. 34**
- p>CODE +
- L**
-
- IMPRESS controls the impact of the printed characters
- P. 34**
- p>CODE +
- M**
-
- QUANTITY checks the remaining memory quantity
- P. 58**
- p>CODE +
- N**
-
- NEXT locates next position of the word or the "NAME" term being searched
- P. 42, 50, 68**
- p>CODE +
- O**
-
- RENAME renames texts
- P. 57**
- p>CODE +
- P**
-
- STOP sets a Stop Code in a text
- P. 60**
- p>CODE +
- Q**
-
- BLOCK moves, copies and deletes information block in a text
- P. 54, 55**
-
- sets a separate mark between the first name and the last
-
- name in an Address List
- P. 64**
- p>CODE +
- R**
-
- RMF prints information with the last character on each line aligned
-
- at the right margin
- P. 31**
- p>CODE +
- S**
-
- SEARCH searches words in a phrase or a text
- P. 42, 50**
-
- searches only "NAME" terms in an Address List
- P. 68**
- p>CODE +
- T**
- copy a text to another text name
- P. 56**
- p>CODE +
- U**
-
- UL sets/releases Continuous Underlining
- P. 27**
- p>CODE +
- V**
-
- OG FORM stores Margin Format and changes Margin Format in a text
- P. 59**



CODE +  sets/releases Word by Word Underlining 

CODE +  replaces a word/words in a phrase or a text 



CODE + 1-20 →  .. recalls/stores phrase memory 



CODE +  instructs the typewriter to enter the previous line edit 
scrolls backward through the first characters of each line
in a phrase or a text 
moves to the "NAME" term of previous record 



CODE +  scrolls forward through the first characters of each
line in a phrase or a text 
moves to the "NAME" term of next record 



CODE +  makes correction manually in normal mode/clears
phrases, texts or records 



CODE +  Permanent Hyphen 



CODE +  Permanent Space 



CODE +  aligns decimal points at the preset tab stops 

CODE +  clears all tabs 

CODE +  searches the return mark while executing the word search
command or the word replace command 



CODE +  Presets the unit for typing capital letters, lower case numbers,
punctuation marks and symbols 



CODE +  moves the paper down 1/2 line 



CODE +  stores information without printing or carriage movement 

CODE +  moves the carriage to the beginning of the line without
line spacing 

CODE +  lists words registered in the user's dictionary 

CODE +  deletes words from the user's dictionary 

CODE +  registers words in the user's dictionary 

CODE +  erases one line at a time 

6-3 LIST OF DISPLAY MESSAGES

<i>Message</i>	<i>Description</i>
ADDED:	<i>You can register the word into the user's dictionary.</i>
ADDRESS LIST [ADDR.]	<i>Enter the address.</i>
ADDRESS LIST [NAME]	<i>Enter the name.</i>
ADDRESS LIST [PHONE]	<i>Enter the phone number.</i>
ADDRESS LIST END	<i>The Address List is completed.</i>
ADDRESS LIST IN/EDIT/LIST? .	<i>Do you want to enter a record; recall a record or print records of the Address List?</i>
ALREADY EXISTS	<i>The entered word has already been registered in the user's dictionary. The entered text name has already been stored in the memory.</i>
AUTO COLUMN	<i>You can perform the Auto Column function.</i>
AUTO COLUMN END	<i>The Auto Column is completed.</i>
BOTTOM OF LIST	<i>The position is end of record in the Address List Memory.</i>
CAN NOT DELETE	<i>You can not delete the word. Because the entered word has already been registered in the standard dictionary.</i>
CAN NOT REPLACE	<i>You can not replace the word.</i>
CENTERING	<i>You can center information; between margins, between the tab stops, over a specified point and Auto Half Space.</i>
CHANGE FORMAT Y/N?	<i>Do you want to change the margin format stored in the text?</i>
CHANGING	<i>The machine is changing words.</i>
##### CHARACTERS LEFT	<i>The numeric value represents the number of characters left in memory.</i>
CHECK MARGIN WIDTH!!	<i>The margin is too small. Check the margin width.</i>
CHECK PLATEN!	<i>Something is wrong with the mechanical line space. Please check it.</i>
CHECK RIBBON!	<i>Something is wrong with the ribbon cassette or the correction tape. Please check them.</i>
CLEAR THIS PHRASE Y/N? ...	<i>Do you want to clear this phrase from memory?</i>
CLEAR THIS TEXT Y/N?	<i>Do you want to clear this text from memory?</i>
CODE	<i>CODE key is pressed.</i>
## COLUMNS [MAX ## CHR.] .	<i>Indicates the number of columns and the maximum number of characters.</i>
COLUMN: ## [MAX ## CHR.] .	<i>Indicates the number of column and the maximum number of characters.</i>
CONTINUE TEXT Y/N?	<i>Do you want to continue typing in the text?</i>
CONTINUE Y/N?	<i>Do you want to continue printing?</i>
COPY THIS PHRASE Y/N?	<i>Do you want to add this phrase to the body of the text?</i>
CURRENT-WORD=	<i>Enter the word or words you want to replace.</i>
DECIMAL TABULATION	<i>You can automatically align the decimal points at the preset tab stops.</i>
DELETE THIS RECORD Y/N? ..	<i>Do you want to clear this record from memory?</i>
DELETED:	<i>You can delete the word from the user's dictionary.</i>
DICTIONARY EMPTY!	<i>There are no words in the user's dictionary.</i>
DICTIONARY FULL!	<i>There is no memory in the user's dictionary.</i>
ENTER DATA	<i>Enter the name.</i>
EXTERNAL MODE: OFF LINE ..	<i>The machine can not receive the data from a computer and stop printing.</i>
EXTERNAL MODE: ON LINE ...	<i>The machine can receive the data from a computer and you can use it as a printer.</i>
HOW MANY COLUMNS? 2-12 ...	<i>How many columns?</i>
INDIVIDUAL/GLOBAL?	<i>Do you want to replace the word individually or globally?</i>

<i>Message</i>	<i>Description</i>
INPUT DATA	<i>Enter each column's data.</i>
INPUT HEADING Y/N?	<i>Do you want to enter the heading or data?</i>
LID OPEN	<i>The top cover is opened.</i>
LIST MODE END	<i>This position is end of the list in the user's dictionary.</i>
MACHINE IS BUSY!	<i>The machine is operating.</i>
MANUAL CORRECTION	<i>You can make corrections over previous 3 lines.</i>
MARGIN CURRENT/STORED? ..	<i>Which margin format do you want to use, the current one or the one you used when storing the text?</i>
MEMORY FULL!	<i>Entire memory capacity has been used.</i>
MOVE/COPY/DELETE?	<i>Do you want to move the block?; copy the block?; delete the block you have marked?</i>
NEW NAME=	<i>Enter the new name for a stored text.</i>
NO ALTERNATIVES	<i>No alternatives are in the standard or user's dictionaries.</i>
NO MORE ALTERNATIVES	<i>The standard and user's dictionaries have no more alternatives.</i>
NO PRINT	<i>You can store information without printing it on the paper.</i>
NO RECORDS	<i>Records are not in the Address List.</i>
NOT ACCEPTED	<i>The entered word is error.</i>
NOT FOUND!!	<i>The required word is not within this phrase, text or address list or the text not in memory. The entered word does not exist in the user's dictionary.</i>
OUT OF CORRECTION MEMORY .	<i>You can not make corrections within the previous 3 lines.</i>
PHRASE ##	<i>The selected phrase number is available for storing text.</i>
PREVIOUS LINE EDIT	<i>You can make corrections within the previous 3 lines.</i>
PRINT PHONE NO. Y/N?	<i>Do you want to print the phone number?</i>
PRINTING	<i>The machine is printing.</i>
REPLACE-WORD=	<i>Enter the word or words you want to insert.</i>
REPLACE/NEXT/CANCEL?	<i>Do you want to replace the word?; advance to the next occurrence?; cancel this operation?</i>
RIGHT MARGIN FLUSH	<i>You can print the information with the last character of each line aligned at the right margin.</i>
SEARCHING FOR	
ALTERNATIVES	<i>Searching for suggested spellings.</i>
SEARCH-NAME=	<i>Enter the name you want to search for.</i>
SEARCH-WORD=	<i>Enter the information you want to search for.</i>
STOP CODE	<i>Insert variable information here and press the PRINT key to continue text.</i>
STOP CODE WAS SET	<i>Stop printing command for variable entry.</i>
TERM TOO LONG	<i>The entered characters are too long.</i>
TEXT IN/EDIT/LIST?	<i>Do you want to enter a text; recall a text; or print a list of texts in memory?</i>
TEXT NAME=	<i>Enter the name of the text.</i>
TEXT PRINTING	<i>The machine is printing from text or phrase memory.</i>
TEXT TO COPY=	<i>Enter the text name you want to copy.</i>
TOO MANY RECORDS!	<i>You have tried to enter more than the maximum number of records.</i>
TOO MANY TAB STOPS!	<i>You have tried to enter more than the maximum number of tab stops.</i>
TOP OF LIST	<i>This position is top of list in the Accu-Spell Plus Mode or record in the Address List Mode.</i>
VERIFIED	<i>Verifying is completed.</i>
VERIFYING	<i>The machine is verifying.</i>
WORD TOO LONG	<i>The entered word is too long (greater than 30 characters).</i>

6-4 OPTIONAL ACCESSORIES

- Replacement parts and accessories are available through your local authorized parts distributor.
- For the authorized distributors in your area, call toll free: 1-800-447-4700.

Part No.	Description	Comment
KX-R10	Daisywheel Printing Element COURIER 10	1 unit
KX-R11	PRESTIGE PICA 10	1 unit
KX-R12	PRESTIGE ELITE 12	1 unit
KX-R13	SCRIPT 10/12	1 unit
KX-R14	GOTHIC 15	1 unit
KX-R20	Correctable Film-Ribbon Cassette	1 unit
KX-R21	Fabric Ribbon Cassette	1 unit
KX-R30	Lift-off Correction Tape	2 units
KX-R31	Cover-up Correction Tape	2 units
KX-R50	Correctable Film-Ribbon Cassette	2 units
KX-R51	{ Correctable Film-Ribbon Cassette	{ 3 units
	{ Lift-off Correction Tape	{ 2 units
KX-R52	{ Correctable Film-Ribbon Cassette	{ 3 units
	{ Lift-off Correction Tape	{ 2 units
	{ Daisywheel (KX-R13)	{ 1 unit
KX-R60	Interface Adaptor	1 unit

6-5 SPECIFICATIONS

Print Element:	Daisywheel; 96 characters
Print Speed:	12 cps
Print Pitch:	10, 12, 15 characters per inch
Line Spacing:	1, 1½, 2
Paper Width:	12"
Writing Line:	10"
Ribbon:	Correctable Film-Ribbon, Fabric Ribbon (Optional)
Correction Tape:	Lift-off Tape, Cover-up Tape (Optional)
Operating Modes:	TPW, L/L, JST
Memory Life:	Min. 5 years (Lithium Battery)
Correction Memory:	3 lines
Phrase/Text/Address List Memory:	27,000 Characters
Built-in Dictionary:	63,000 words
User Dictionary:	120 words
Display Type:	Liquid Crystal Display with contrast adjuster
Display Size:	40 chr. × 4 lines
Interface:	Parallel (Centronics) with optional Interface Adaptor KX-R60 (receive only)
Power Requirements:	AC 120 V ±10% 60 Hz
Power Consumption:	35 W (Approx. 3 W: When the power switch is turned off)
Operating Temperature:	41°F (5°C) to 95°F (35°C)
Operating Humidity:	20 to 80% RH
Storage Temperature:	−4°F (−20°C) to 140°F (60°C)
Dimensions:	17" (W) × 14¾" (D) × 4¾" (H) (432 × 375 × 112 mm)
Weight:	12 ¾ lbs. (5.8 kg)

6-6 INDEX

- A** Accent Symbols 9
 Accessories 90
 Accu-Spell PlusTM 75
 Verify/Correct the Spelling
 of an Entire File 78
 Word endings 77
 Accu-Spell Plus ON/OFF key 75
 AC Power Cord 14
 ADDRESS LIST key 13
 ADDRESS LIST MEMORY 62
 Auto Carriage Return 29
 AUTO COLUMN key 13
 AUTO COLUMN 35
 Auto Half Space 31
- B** BACKSPACE key 13
 Block Modifying
 Block copy 55
 Block delete 55
 Block move 55
 Mark a block 54
 Bold Print 27
- C** CANCEL·LIST key 75
 Caps Lock 33
 Carriage 6
 Carriage Return 29
 Carriage stopper 3
 Carrying Handle 7
 Centering
 Between Margins 29
 Between Tab Stops 30
 Over a Specified Point 30
 Auto Half Space 31
 Character Set 83
 CODE key 12
 Control Codes 84
 Correction
 One Line Erase 26
 Manual Correction 22
 Using no Print method 23
 Quick Erase 26
 Within correction memory.. 20, 21
 Correction Tape 15
- D** Daisywheel 15
 Dead keys 9
 Decimal Tabulation 28
 Deleting
 A phrase 43
 A record 74
 A text 58
 Information block 55
 Words from user's dictionary.. 80
- E** Express key 13
- F** FORWARD key 13
 Function keys 12
- H** Half Space 34
 Hard Cover 3
 Hot Zone 19
- I** INDEX key 12, 20
 Interface Adaptor 82
- K** KBI 9
 KBII 9
- L** LCD 6
 LCD Display Contrast Adjuster 7
 LCD up Button 6
 LEFT MARGIN key 12
 Line Spacing 9
 List
 Address lists 70
 Text lists 57, 58
 User's dictionary 81
- M** Margin Format
 Clearing 18
 Setting 18
 Changing 59
 MARGIN RELEASE key 12
 MEMORY Back-up 14
 Memory Left 58
 Micro-Pitch Spacing 34
- N** Normal Typing Mode 8, 29

P	<i>Paper Bail</i>	7
	<i>Paper Bail Lever</i>	6
	<i>Paper Bail Rollers</i>	7
	<i>Paper Guide</i>	6, 16
	<i>Paper Release Lever</i>	7
	<i>Paper Support</i>	6
	<i>Paragraph Indent</i>	32
	<i>Permanent Hyphen</i>	32
	<i>Permanent Space</i>	33
	<i>Phrase</i>	
	<i>Clearing</i>	43
	<i>Inserting into text</i>	53
	<i>Modifying</i>	41
	<i>Storing</i>	39
	<i>Phrase Memory</i>	39
	<i>Pitch Scale</i>	7
	<i>PITCH Selector</i>	8
	<i>Platen</i>	6
	<i>Platen Knob</i>	6, 7
	<i>Power Input Jack</i>	7
	<i>Power Switch</i>	7, 14
	<i>PRINT key</i>	13
	<i>Printing</i>	
	<i>ADDRESS LIST</i>	69
	<i>From a point</i>	48
	<i>Halt printing</i>	40, 48, 70
	<i>Phrases</i>	40
	<i>Text</i>	47, 48
	<i>Text names</i>	58
Q	<i>QUICK ERASE key</i>	13
R	<i>RELOC key</i>	13
	<i>REPEAT key</i>	12
	<i>RETURN key</i>	13
	<i>REVERSE INDEX key</i>	12, 20
	<i>Ribbon Cassette</i>	14
	<i>Ribbon Cassette Stopper</i>	3
	<i>RIGHT MARGIN key</i>	12
	<i>Right Margin Flush</i>	31

S	<i>Safety Interlock Switch</i>	7
	<i>Selector Keys</i>	8
	<i>KB key</i>	9
	<i>LINE SP key</i>	8
	<i>MODE key</i>	8
	<i>PITCH key</i>	9
	<i>SHIFT key</i>	12, 13
	<i>SHIFT Indicator</i>	12
	<i>SHIFT LOCK key</i>	12
	<i>SPACE BAR</i>	12
	<i>Stop Code</i>	60
	<i>Subscript</i>	20
	<i>Superscript</i>	20
T	<i>Tab</i>	
	<i>Centering between</i>	29
	<i>Clearing</i>	18
	<i>Decimal</i>	28
	<i>Setting</i>	18
	<i>TAB key</i>	12
	<i>TAB CLEAR key</i>	12
	<i>TAB SET key</i>	12
	<i>TEXT key</i>	13
	<i>TEXT</i>	
	<i>Adding</i>	46
	<i>Clearing</i>	58
	<i>Copy</i>	56
	<i>Modifying</i>	49
	<i>Printing</i>	47
	<i>Renaming</i>	57
	<i>Stop printing</i>	48
	<i>Storing</i>	45
	<i>TEXT CLR (☒) key</i>	13
	<i>Text Memory</i>	44
	<i>Top Cover</i>	6
	<i>Typing Impression Control</i>	34
U	<i>Underlining</i>	
	<i>Continuous</i>	27
	<i>Word by Word</i>	27
W	<i>Word Replace</i>	51
	<i>Word Search</i>	50
	<i>Word-Wrap</i>	59

To locate an Authorized Servicenter in your area within the Continental U.S.A.

DIAL TOLL FREE: 1-800-447-4700

24 Hours a Day, 7 Days a Week

Consumers requiring assistance with service matters should contact the appropriate Regional Administration Office:

EASTERN

2250 Cabot Blvd., West
Langhorne, PA 19047
(215) 741-0676

MIDWEST

425 East Algonquin Road
Arlington Heights, IL 60005
(312) 981-4842

WESTERN

6550 Katella Avenue
Cypress, CA 90630
(714) 373-7438

SOUTHERN

1854 Shackelford Court,
Suite 105
Norcross, GA 30093
(404) 925-6860

Covers:

CT, DE, ME, MD, MA,
NH, NJ, NY, PA, RI, VT,
VA, DC, WV

Covers:

IL, IN, IA, KS, KY, MI,
MN, MO, NE, ND, SD,
OH, WI

Covers:

AK, AZ, CA, CO, ID,
MT, NV, NM, OR, UT,
WA, WY

Covers:

AL, AR, FL, GA, LA,
MS, NC, SC, TN, TX,
OK

Consumers requiring product information or operating assistance with a consumer product should contact:

CONSUMER AFFAIRS DEPARTMENT 2F-3

50 Meadowland Parkway Secaucus, N.J. 07094 (201) 348-9090

Service in Puerto Rico

MATSUSHITA ELECTRIC OF PUERTO RICO, INC.

Panasonic Sales Company/Factory Servicenter

San Gabriel Industrial Park
65th Infantry Avenue KM 9.5
Carolina, Puerto Rico 00630 (809) 750-5135

Service in Hawaii

PANASONIC HAWAII, INC.

99-859 Iwaiwa Street, P.O. Box 774
Honolulu, Hawaii 96808-0774 (808) 488-1996

F90120

Your product is designed and manufactured to ensure a minimum of maintenance. However, should your unit ever require service, a nationwide system of FACTORY SERVICENTERS and AUTHORIZED INDEPENDENT SERVICENTERS is maintained to support your product's warranty.

**Service in the Continental U.S.A. ...
Factory Servicenters**

MATSUSHITA SERVICES COMPANY

Division of Matsushita Electric Corporation of America
50 Meadowland Parkway, Secaucus, New Jersey 07094

ALABAMA

2523-5th Avenue, South
Birmingham, AL 35233
205-252-4195

ARIZONA

9332 North 95th Way
Suite 101
Scottsdale, AZ 85258
602-968-8645

CALIFORNIA

6550 Katella Avenue
Cypress, CA 90630
714-373-7426
930 South Mt. Vernon Drive
Colton, CA 92324
714-825-3110
800 Dubuque Avenue
So. San Francisco, CA 94080
415-871-6373
20201 Sherman Way
Suite 102
Canoga Park, CA 91306
818-709-1775
3878 Ruffin Road
Suite A
San Diego, CA 92123
619-560-9200

COLORADO

14401 E. 33rd Place
Suite E
Aurora, CO 80011
303-371-6968

FLORIDA

16175 NW 52nd Avenue
Miami, FL 33014
305-624-6521
4115 W. Kennedy Boulevard
Tampa, FL 33609
813-289-9726

GEORGIA

1575 Northside Dr.
Suite 325, Atlanta, GA 30318
404-351-8978
4245 International Blvd.
Suite C
Norcross, GA 30093
404-925-6880

ILLINOIS

425 E. Algonquin Road
Arlington Heights, IL 60005
312-981-4840

MARYLAND

Sulphur Spring Business Park
1638 Sulphur Spring Road
Baltimore, MD 21227
301-242-2607

MASSACHUSETTS

383 University Avenue
Westwood, MA 02090
617-329-4280

MINNESOTA

7850-12th Avenue, South
Airport Business Center
Bloomington, MN 55420
612-854-8624

MISSOURI

13711 Rider Trail North
Earth City, MO 63045
314-739-5301

OHIO

494 Northland Boulevard
Cincinnati, OH 45240
513-851-4180

PENNSYLVANIA

2250 Cabot Blvd.,
West Langhorne, PA 19047
215-741-0661
4986 Library Road, Rt. 88
Hillcrest Shopping Center
Bethel Park, PA 15102
412-343-0555

TENNESSEE

925-8th Avenue, South
Nashville, TN 37203
615-244-4434

TEXAS

7420 Harwin Drive
Houston, TX 77036
713-781-1528
4500 Amon Carter Blvd.
Fort Worth, TX 76155
817-685-1060

WASHINGTON

20425-84th Ave., South
Kent, WA 98032
206-872-7922

As of Jan. '89

PANASONIC HAWAII, INC.
99-859 Iwaiwa Street
P.O. Box 774
Honolulu, Hawaii 96808-0774

PANASONIC COMPANY, DIVISION OF
MATSUSHITA ELECTRIC CORPORATION
OF AMERICA
One Panasonic Way
Secaucus, New Jersey 07094

PANASONIC SALES COMPANY, DIVISION
OF MATSUSHITA ELECTRIC OF PUERTO
RICO, INC.
San Gabriel Industrial Park
65th Infantry Avenue KM 9.5
Carolina, Puerto Rico 00630

PANASONIC WORD PROCESSING TYPEWRITER LIMITED WARRANTY

Panasonic Company, Panasonic Hawaii, Inc. or Panasonic Sales Company (Collectively referred to as "Panasonic") will repair this product, free of charge, in the U.S.A. or Puerto Rico from the date of the original purchase in the event of a defect in materials or workmanship as follows:

Parts

New or rebuilt parts in exchange for defective parts for one (1) year from original purchase.

Labor

Carry-in or mail-in service for ninety (90) days after original purchase. After the labor warranty period is over, purchaser pays for all labor charges for removal and installation.

Carry-in or mail-in service in the continental U.S.A. can be obtained during the warranty period from a Matsushita Services Company (MSC) Factory Servicenter listed in the Servicenter Directory, or call 800-447-4700, toll free, to locate an authorized MSC Servicenter. Carry-in or mail-in service in Hawaii or Puerto Rico can be obtained during the warranty period by calling the telephone numbers listed in the Servicenter Directory.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of date of original consumer purchase will be required before warranty performance is rendered.

One Year (1) Extended Warranty on Lithium Batteries

New Lithium battery in exchange for a defective Lithium battery during the first twenty four (24) months after the original purchase.

This warranty only covers failures due to defects in materials or workmanship which occur during normal use and does not cover the print ribbon, or correction tape. It does not cover damage which occurs in shipment or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, line power surge, or commercial use such as hotel, office, restaurant or other business use or rental use of the product, or service by anyone other than an MSC Factory Servicenter or authorized MSC Servicenter, or damage that is attributed to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above.

PANASONIC SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This limited warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, write to the Consumer Affairs Division at the company address indicated above.

FOR YOUR PROTECTION

Complete and immediately mail the Product Analysis Card so that we may contact you directly in the event a safety notification is issued in accordance with the 1972 Consumer Product Safety Act, or for other reasons Panasonic may deem necessary. Also, we ask that you complete the questionnaire so we may analyze your comments and, in this way, help us evaluate customer needs.

IF YOU SHIP THE PRODUCT

Carefully pack and send it prepaid, adequately insured and preferably in the original carton. Attach a postage-affixed letter, detailing the complaint, to the outside of the carton. *Do NOT send the product to the Executive or Regional Sales office. They are NOT equipped to make repairs.*